VOL. CCXXVIII, No. 2967
PRICE TWO SHILLINGS

Fit "TripleX"- and be safe
Regd

THE SPHERE
With which is incorporated "BLACK & WHITE"
FEBRUARY 9, 1957

The SPHERE

with which is incorporated The GRAPHIC

— THE WORLD'S NEWS IN PICTURES

BULMER'S
POMAGNE

BY APPOINTMENT TO H.M. THE QUEEN
CIDER MAKERS H. P. BULMER & CO. LTD, HEREFORD
CHAMPAGNE CIDER
Also in Baby Bottles

"King George IV"
OLD SCOTCH WHISKY

THE DISTILLERS AGENCY LTD. EDINBURGH · SCOTLAND

GET
YOUNGER
EVERY DAY
William Younger's Ales & Stout

Fortnum & Mason
F M
for the fundamentals
and the frills

MORNY
of Regent Street · London
FINE SOAPS · MATCHING BATH LUXURIES · PERFUMES

Drambuie
THE DRAMBUIE LIQUEUR CO., LTD., YORK PLACE, EDINBURGH.

Otard
COGNAC
BRANDY
FAMOUS SINCE 1795

By Appointment Purveyors of Champagne to the late King George VI.
CHAMPAGNE
Charles Heidsieck
REIMS
FINEST QUALITY EXTRA DRY
CHARLES HEIDSIECK

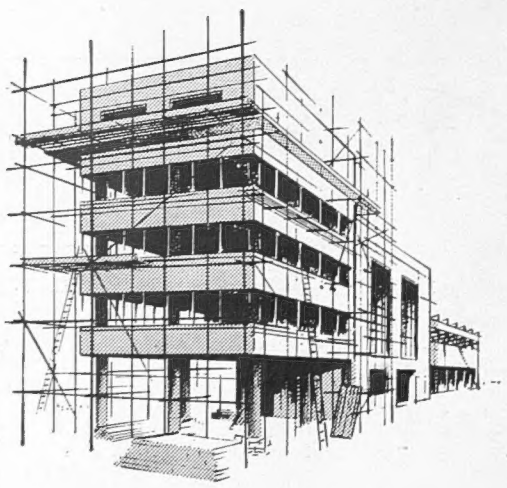
Incorporated in 1720
ROYAL EXCHANGE
ASSURANCE
HEAD OFFICE AT THE ROYAL EXCHANGE, LONDON
For all your Insurances

PUBLISHING OFFICE: INGRAM HOUSE, 195-198, STRAND, LONDON, W.C.2

Registered as a Newspaper for Transmission in the United Kingdom

FOR POSTAGE RATES SEE FRONTISPIECE PRICE 2/-

. . . that's the point



"I think we are all agreed that it was a wise move to call in those Turriff people. The whole job completed right on schedule, and a very fine job too." Turriff is rather proud of such compliments, by no means unusual. If we may be permitted to blow our own trumpet, perhaps it is not altogether surprising when one considers the amount of meticulous planning of every detail carried out right from the outset with the client and his consultants. The rapid, ordered progress at every stage of the construction programme ensured by an adequate supervisory team with the requisite knowledge, drive, enthusiasm and foresight. The co-ordination of labour, plant and materials in sufficient quantity and exactly where required on the site at the right time. The ———— But then, that's how it is when you team up with Turriff.

TURRIFF

TURRIFF CONSTRUCTION CORPORATION LTD., BUDBROOKE RD., WARWICK TELEPHONE 811

Beardmore

Volume CCXXVIII No. 2967

The SPHERE, London, February 9, 1957

The SPHERE

with which is incorporated THE GRAPHIC

RE-ESTABLISHING ANGLO-AMERICAN RELATIONS—MR. DUNCAN SANDYS RETURNS FROM VITALLY IMPORTANT DISCUSSIONS IN WASHINGTON : The Minister of Defence is seen alighting at London Airport. He had had conversations with Mr. Wilson, the U.S. Defence Secretary, and declared that he had no doubt that America wished to re-establish "fully and at once the special and intimate relationship between our two countries which was momentarily interrupted by recent events."

Mr. Sandys' journey to Washington was of the utmost significance, because he was the first member of Mr. Macmillan's new Cabinet to visit personally the United States Government. On his return last Sunday he expressed his belief that on both sides of the Atlantic there was a strong desire to renew the Anglo-American friendship on its pre-Suez basis. Hardly less important than this broad diplomatic task of transatlantic reunion was the particular subject of his talks. They ranged widely over the future of the common defence policy of the two countries. At the end of the Sandys–Wilson discussions a statement was issued in Washington which made three points: (1) Britain might adopt certain American weapons; (2) financial and economic stability must be recognised as the basis of the maintenance of conventional and nuclear military capacity ; (3) Mr. Sandys discussed the international aspect of the military programme with Mr. Dulles. No details were given about possible American help regarding weapons, especially guided missiles. But it is generally assumed that Britain will now be able to make defence reductions.

Postage—Inland, 3d. ; Canada, 1d. ; Elsewhere Abroad, 2½d.

IN HONOUR OF AUSTRALIA

THE DUKE OF GLOUCESTER ATTENDS THE AUSTRALIA CLUB DINNER IN LONDON: He is in conversation with Sir Eric Harrison, the new Australian High Commissioner. On the left is the Duchess of Gloucester, and on the right is Lady Harrison. The dinner was given by the Club (of which the Duke is President) to welcome Sir Eric and to celebrate Australia Day.

FLEET STREET'S FIRST COFFEE HOUSE

THE LORD MAYOR OF LONDON AT THE CHESHIRE CHEESE: Sir Cullum Welch smokes a churchwarden pipe with two "taverners" at the Cheshire Cheese tavern. The visit marked the tercentenary of the start of Coffee Houses in Fleet Street among which the Cheshire Cheese was one of the earliest.

LONDON'S TWO-MAN SHOW

AN UNUSUAL ENTERTAINMENT IN A LONDON THEATRE: Michael Flanders and Donald Swann hold the stage of the Fortune Theatre with two hours of witty lyrics, monologues and duologues. The success of *At the Drop of a Hat* is due to the two young men who are entirely responsible for the words and music and who deliver them without the aid of properties or scenery. Michael Flanders wrote the lyrics and Donald Swann the music. The two met at school where they began their partnership. Michael Flanders, a victim of poliomyelitis, is confined to a wheel-chair, but it is evidence of his skill as an entertainer that the audience is never conscious of his disability. The originality of the show has made it a feature of the current London theatre season.

RATES OF SUBSCRIPTION TO "THE SPHERE"

Orders for subscription to THE SPHERE *should be handed to any bookstall or newsagent, or addressed to the Subscription Department,* THE SPHERE, *Ingram House,* 195-198, *Strand, London, W.C.2. The rates for* 12 *months, including Christmas Number, for Great Britain and Eire, are* £6 1*s.* 6*d.; 6 months and Christmas Number,* £3 3*s.; 6 months without Christmas Number,* £2 18*s.* 6*d. For Canada the rates for the same periods are* £5 14*s.* 6*d. (or* $16), £2 19*s.* 6*d. and* £2 15*s.; and for elsewhere Overseas* £5 19*s.* ($16.50 *cents in the U.S.A.),* £3 1*s.* 9*d. and* £2 17*s.* 6*d. All terms above include postage.*

A London Newsletter

195-198, STRAND, W.C.2.

No Such Word . . .—There is no such word as "impossible." The truth is rammed in upon us constantly. One would have said that it was quite impossible that Mr. Dulles, famous for his *gaffes* and spanners, could have used the words he did before the Senate concerning British and French soldiers in the present ticklish state of Anglo-American relations. Granting that he attached a different meaning to his words to that assumed in Britain and France, a statesman is presumed, even in a domestic conference, to choose words not easily capable of misinterpretation even apart from its context—an interpretation which would amount to sheer insult. Mr. Dulles should know by now how American reporters select their fare for the day's headlines. Mr. Dulles perhaps *is* an exception. He really *is* sometimes impossible. And Mr. Nehru? From his self-chosen world pulpit, he has bored and flagellated all lesser statesmen and nations for months past for their frailties and colonialisms and lapses from international morality. But precept and practice are not the same thing with the preacher. If Britain, France or Israel flout the resolutions and principles of the U.N., those are sins which Mr. Nehru is self-appointed to trounce; but if a resolution of the U.N. should run counter to the aspirations and policies of Mr. Nehru, then the authority of the U.N. is of no account—a scrap of paper. Poor old U.N.! By what means now can it maintain its vanishing and tarnished panache and authority? What wordy resolution of its majority of solid blocs and little States, each with its little parish-pump handle to work, can save its face after the great apostle, Nehru, has quitted his niche among the saints beside Nasser, and joined the ranks of the U.N.'s fallen angels, France, Britain and Israel, and the Lucifers of the Kremlin? If there *is* such a word as "impossible," it can be applied to the U.N.'s present position, wherein every cause which comes before it is foredoomed by pre-judgment, and any "unpopular" nation's cause cannot hope for consideration on the merits of the evidence adduced. The veto and the bloc vote have smashed its machinery.

Hopes of a Reformed U.N.?—When it comes to a vote on a U.N. resolution, I often say "*Credo quia impossibile*" when I learn the result. It was doubly so when I learned of the U.N.'s almost unanimous demand for Israel's withdrawal to her *status quo ante* frontiers without any promise or hint of guarantees, and when I learned that Britain actually voted for the resolution as it stood. That seemed to me a new setback to our hopes not only of an impartial and realistic U.N. emerging from its own ruins but of a new and courageous and firm and consistent foreign policy by our new Government. It seemed to suggest that the U.N. is still irresponsible, feeble and partial and Britain still wearing sackcloth. If the U.N. had no early intention of declaring how it will implement its bare, bounden and acknowledged responsibilities in this troubled area, Israel had the strongest case for remaining firm, until the Gaza strip is safeguarded against the return of Egyptian marauders and the Gulf of Aqaba is guaranteed freedom for Israeli and other shipping. Moreover, the case is nearly as strong for the further condition of withdrawal by Israel that the Canal also, when open, will be free to Israeli shipping. These wrongs done to Israel by Egyptian actions and decisions have long been tolerated by the U.N. in its cowardly and vacillating and one-sided history, and its latest vote seems to show that that body has gained no courage or initiative from its new set of teeth. As for our failure to stand beside France in opposition to the vote, it must have earned us the contempt of Frenchmen and wrecked some part of our own defence of our policy and actions *vis-à-vis* Suez which our new Prime Minister and our Foreign Secretary both supported. No doubt, the reason for Britain's support of that outrageous resolution was designed to be consistent with our assurance, dragged out at last, that Sir Anthony's Government had no cognisance of Israel's intentions before the ultimatum.

Ministers of Power.—Apart from the Premier, the new Government appears to possess three "Ministers of Power"—Lord Mills, Mr. Sandys and Dr. Hill. Lord Mills's title as Minister of Power means what it says. Mr. Sandys, as Minister of Defence, is said to be invested with more power than any of his ten recent predecessors, but their power was little enough. The Premier clearly has much faith in the enlargement of power he has given Mr. Sandys for he announced or foreshadowed in advance the really important retrenchments in defence expenditure, which Mr. Sandys is to achieve gradually, and the resulting improvement to the taxpayer and to the modernised Services. The mere fact that Mr. Sandys is to be reinforced with a new Chief of Staff or Chairman of the Chiefs of Staff Committee will hardly strengthen his hand, if his Chief of Staff is to become an iron curtain between himself and the Service chiefs. There is advice which only the fighting chiefs can give when cuts are contemplated and new defence models forged. But, as at present advised, the Service departments and the Ministry of Supply will continue as separate departments of State and presumably will continue to be answerable to Parliament on matters of Service administration. Mr. Sandys is given a not-fully-defined power to "intervene" on Service matters, as, of course, on political aspects. Without a clearer definition of his powers, it looks as if he may still be at loggerheads with Service chiefs of the Jackie Fisher type. As for Dr. Hill (Duchy of Lancaster), his Power portfolio is that of co-ordinating all Government information services. Again it has been given out that all Government departments which possess information services will carry on as before. No doubt Dr. Hill can do some good work in cutting costs. But it is difficult to see how he is to co-ordinate the matter put out by half-a-dozen independent master-propagandists dealing with subjects worlds apart.

COMMEMORATING THE MARTYR KING

THE ANNUAL MEMORIAL SERVICE FOR KING CHARLES I IN LONDON: The Rev. Hubert J. Sillitoe conducts the remembrance service for the Society of King Charles the Martyr outside the Royal United Service Institution in Whitehall, close to the actual spot of the King's execution in 1649. A church service was held later at St. Mary-le-Strand. Other ceremonies included those organised by the Royal Martyr Church Union at the statue of the King at the top of Whitehall, and at St. Martin-in-the-Fields. The annual commemoration of King Charles is now being much more widely observed.

A Fine Tradition Ended.—I read with real sorrow that the bulk of the Warwickshire Estate of Lord Willoughby de Broke is to be sold later in 1957. The big eighteenth-century house, Compton Verney, was sold by Lord Willoughby's father. Since then a private Act of Parliament was passed varying an original settlement made in the time of Henry VIII, whereby succeeding life tenants were precluded from alienating the 5,000-acre estate or raising capital for younger children by sales of portions. My regret is based on my great admiration for a book of reminiscences published in 1924 by the 19th Lord Willoughby, who was a "bonny fighter" at the time of the Parliament Bill struggle. He called it *The Passing Years*. I know no better essay in social history than that well-written book. It gives a true and charming picture of the good relations which could, and did, exist between landlord and tenants on a big country estate where the landlord understood and practised his responsibilities and shared his privileges, and his tenants responded with loyalty and affection and a shared pride in the great house and the family. In such cases, which were not rare, the ugly picture, painted by "left-handed" artists, of patronage, cold charity and selfish privilege, is shown up in its prejudice and falsity. No better witness to the *truth*, uncompromisingly expressed, could

be brought to the box in defence of the best sort of landlords than old Jesse Eales, keeper, friend, teacher and candid critic of four generations of Verneys at Compton Verney. And his evidence proved that even in the days of showmanship and superabundance in the Edwardian era, when the fine old system began to break up, good landlords still practised their responsibilities, and refused to lose their heads and the respect of their tenants.

The Great Mystery.—No more popular and successful symposium in recent times has been launched than the *Sunday Times*' "Great Mystery" concerning survival after death. With his clear brain and cool, convincing arguments, Bertrand Russell opened the proceedings and ranged himself on the side of Swinburne: "Dead men rise up never." And certainly, if the symposium was to be a success, his view was well chosen as the opening of the discussion. For men do not relish the idea that all that they have amassed in their short sojourn on earth in personal reputation, learning and respect will never return to them in another place or be chalked up to their credit when they face a higher court. It is understandable that the failures and down-and-outs should face Russell's negative assessment of mankind's future with less distress than the successful and the prosperous. But if a man accepts, reluctantly or wholeheartedly, Russell's sombre verdict, only a part of the greatest of all mysteries is solved and disposed of. There remains the insoluble mystery of human existence before death, its provenance and its purpose. No scientist as yet has hazarded more than a vague guess at that solution, and when the scientists produce a reasonable explanation, still there will remain for solution a great mystery which more and more obsesses me. If our brief sojourn on earth ends in a handful of grey ashes, though invested with a brief objective and purpose, how is it that after centuries of experience by trial and error, and after a quite notable list of clever inventions, human beings have failed to find a simple formula for making tolerable their little hour upon the stage? Why do we prefer to live in Bedlam if, or when, we have nothing better to look forward to than dust and ashes and oblivion? It is rather like travelling in a cattle-truck with a first-class sleeper in one's pocket.

The Cure for Road Murder.—The roads of Britain in towns and country were probably emptier in January than in December. I remarked that I should confidently expect a big decline in road casualties during the first month following petrol control. It is no surprise to learn that December road deaths were one-third less than in December 1955 and that there were 5,000 fewer victims of injury. This happy mitigation of a shameful national evil has been achieved by economic necessity, not by humanitarianism. The new "victims of the road" are workers in the motor industry, men turned off or on short time. The price of petrol and its scarcity have greatly narrowed the home market for cars. What a subject for a platonic B.B.C. symposium! Is the first responsibility of a modern government to save life or to balance the national Budget? Is an expanding and healthy industry of more importance than an already superabundant population? Socrates or Solomon in all his glory could not supply the answer. If the Government decided to keep motoring a luxury of the rich until the road system had been duplicated and totally modernised, the same problem would face them three years after the completion of the new highway system. The home demand for cars would expand in step and the road casualties would reach new peaks. It must always be true that fewer cars on the road must result in fewer accidents. It is fair to add that the high price of petrol has resulted in fuel economy by reduced speed. It might well be that if all cars used in Britain were harnessed to a maximum speed of 45 m.p.h., the risks of the road would be reduced.

What 's to Come?—A circular from one of those journalistic wizards who possess second sight and back-stairs *laissez-passer*, promises me, for the expenditure of a few shillings, a peep into the immediate future and a pleasurable creeping of the flesh. (1) The crisis, for example, certain to develop when Russia moves into the Middle East, has by no means reached its climax. It has hardly begun. Something bigger is round the corner. When will the crucial phase start? A postal-order will bring me the answer. (2) What will happen to the new Premier when he is faced with the same problem which faced and broke Eden? (3) Who will take his place if he, too, falls like Lucifer? (4) Who is the coming Leader in Britain about whom the politicians are now talking in the corridors? (5) And finally, in the face of all these uncertainties and dangers, what stocks and shares should we buy on 'change for profit or investment? It occurs to me that the patriotic thing to do would be to buy this peep into the future and make a free gift of it to the Premier. The answer to 1 would fore-arm him. On the other hand, the answers to 2, 3 and 4 might discourage him and even unman him in the discharge of his awful responsibilities. And as for 5, I have not the means to profit by the answer. So I shall replace my cheque-book and stay in blinkers with millions of little victims, regardless of their doom.

THE OLD STAGER

A BAILEY BRIDGE IN THE CITY

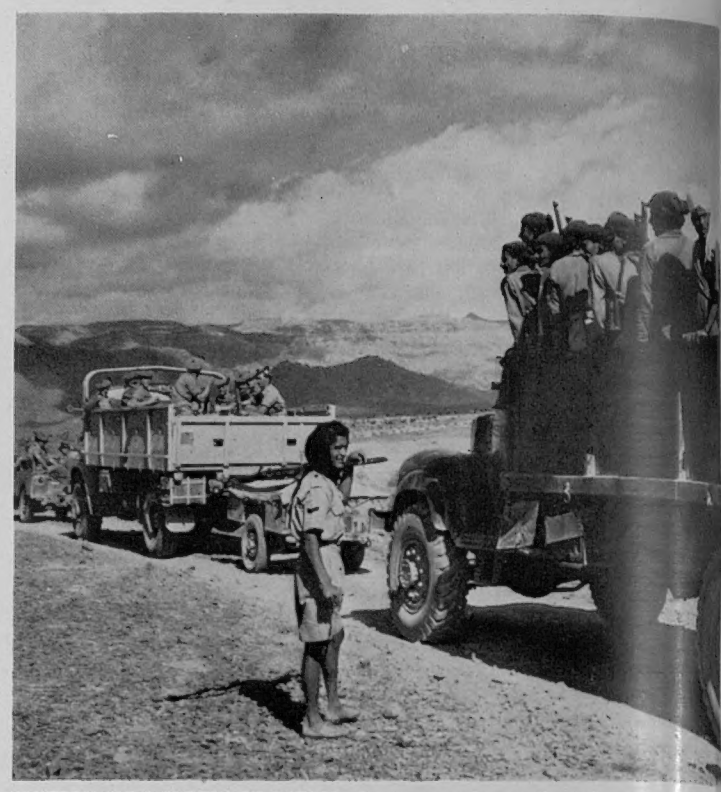
A TEMPORARY BRIDGE ON A CITY BUILDING SITE: Workmen lay the foundations for an approach road to the temporary bridge soon after its erection on a building site at the corner of Holborn Circus and St. Andrew's Street. The bridge is replacing a roadway at Thavies Inn and will provide access for fire-engines and other vehicles. The former roadway, which was once supported by ancient brick spans, is being excavated and the bridge has been built to span the resulting gap of some 60 ft. Bailey bridges became famous during the last war, when the speed with which they could be assembled helped the Allies considerably in Europe. They could replace almost overnight those bridges destroyed by the enemy.

ST. JAMES'S PARK FOOTBRIDGE TO BE REPLACED

BUILDING ONE OF TWO DAMS FOR THE NEW BRIDGE IN ST. JAMES'S PARK: A diving expert (on left), helped by a workman in protective clothing, places sandbags in position for the construction of a dam as the first stage in demolishing the old bridge (in background). Later, a second dam will be built on the other side of the bridge and the 200,000 gallons of water in between will be pumped out. A temporary bridge of tubular scaffolding will be erected to enable pedestrians to cross the lake while the new bridge of pre-stressed concrete is being constructed.

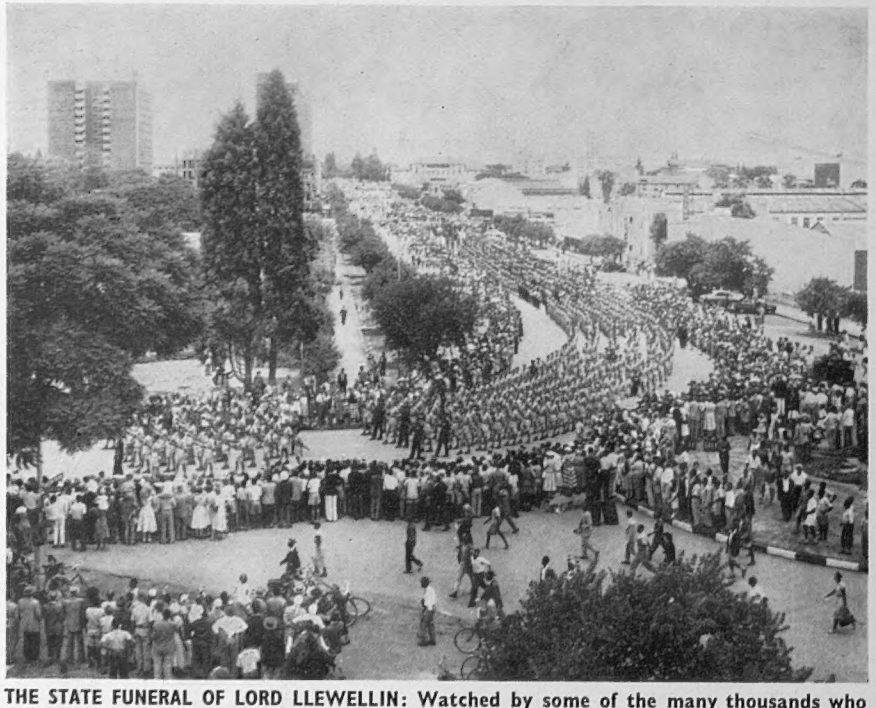
THE NEWS IN PICTURES—I.

PREPARING TO REPEL A TRIBAL RAID IN ADEN: Members of the R.A.F. Regiment and guards of the Emir of Dhala gather to form a motorised patrol near Sanaa, a frontier village in the Western Aden Protectorate, which had been attacked by Yemeni forces. No casualties were reported as a result of the Yemeni raid. A few days later, R.A.F. Regiment officers of the Aden Protectorate Levies were in sterner action further north. They were taking part in the combined ground-air operation with a British land force and R.A.F. aircraft against the two villages of Sawdaniya and Hadhiya in Beihan State, which had been occupied for three weeks by Yemeni raiders. Before the operation the Aden authorities stated that they had always shown themselves ready to discuss frontier problems with the Yemen and were still prepared to do so. But meanwhile they could not allow the Yemeni Government to invade Protectorate territory. A British communiqué issued in Aden last Sunday stated that all targets singled out for the attack in Hadhiya had been destroyed. Venom and Meteor aircraft had between them made seventeen sorties. Sawdaniya was expected to be reoccupied within the next few days.



CAMERON HIGHLANDERS ON PATROL: In the vehicles on the left are men of the 1st Bn., the Queen's Own Cameron Highlanders and (on right) are tribal guards of Dhala, engaged in a patrol near Sanaa, on the Aden frontier.

THE ARCHBISHOP-ELECT OF WESTMINSTER ARRIVES IN LONDON: *On left*—Irish pipers lead the welcome for the arrival of Dr. Godfrey at Euston. A crowd of over 2,000 Roman Catholics met him at the station. *On right*—Dr. Godfrey is greeted by a Church dignitary on the platform at Euston after his arrival from Liverpool. He will be enthroned in Westminster Cathedral on February 11.



THE STATE FUNERAL OF LORD LLEWELLIN: Watched by some of the many thousands who lined the route, the funeral procession of the first Governor-General of the Federation of Rhodesia and Nyasaland passes along Jameson Avenue in Salisbury, Southern Rhodesia.

LAST TRIBUTES: People of many races file past Lord Llewellin's coffin as it lies in state in the Federal Assembly building in Salisbury. As Colonel J. J. Llewellin, he had a distinguished Parliamentary career in Britain and held various ministerial offices during the war.

SOVIET CREDITS FOR CZECHOSLOVAKIA'S URANIUM DEVELOPMENT: Seated on the left is Mr. Viliam Siroky, Prime Minister of Czechoslovakia, and, on the right, is Marshal Bulganin. Immediately behind the Soviet Premier is Marshal Voroshilov, President of the U.S.S.R., with, to the left, President Antonin Zapotocky, of Czechoslovakia, and (to the right) Mr. Khrushchev. The occasion was the signature in the Kremlin of the joint Soviet-Czechoslovak Declaration at the end of the recent visit of the Prague leaders to Moscow. The most important outcome of the talks was the grant by Russia of long-term credits free of interest to Czechoslovakia for the development of uranium ore extraction in the latter country. The lengthy Declaration was largely concerned with reviewing current international events through Communist eyes and contained much condemnation of "Imperialist and colonialist aggression." After assurances of "complete mutual understanding and unanimity" between the two signatories, it was perhaps significant that the Declaration referred to the "large choice of ways to Socialism based on Marxist-Leninist theory." Methods of building Socialism, it added, must depend "on the historical, national and other characteristic features associated with each individual country," but between Socialist countries there was "complete basic unity."

HUNGARY RELEASES FOUR BRITISH STUDENTS: From left to right, seated at the table during their Press conference in the British Embassy in Vienna, are Christopher Lord, Basil Lord, Judith Cripps, who is a grand-daughter of Sir Stafford Cripps, and Roger Cooper. The Press conference was attended by about fifty representatives of British and foreign Press and radio and television. Not much information was forthcoming from the four young students and the Embassy information officer had to explain that he understood that certain arrangements had already been made to sell "exclusive" accounts to London newspapers. When on January 14 the students left Belgrade for Hungary they had valid transit visas for five days. At every stop during their journey they reported to the police and were careful to observe the curfew. Eventually they were asked to go to Budapest for questioning. On arriving there, however, they were put into separate cells in one of the prisons in the Hungarian capital. Miss Cripps went on hunger strike while held in the prison as a protest against being forced to sit on her wooden bed for hours on end facing the watch-hole in the door.

THE HEMINGWAYS RETURN TO NEW YORK: Ernest Hemingway and his wife pose for photographers on board the liner *Ile de France* as they arrive in New York after spending almost six months in Europe. Their stay in New York was brief, for they left almost at once after coming ashore for their home in Cuba.

T. S. ELIOT ARRIVES WITH HIS BRIDE: The sixty-eight-year-old poet and playwright leaves an aircraft at London Airport with his wife after returning from a honeymoon at Menton, in the South of France. Mrs. Eliot, who is thirty years old, was formerly her husband's private secretary. The couple were married at an early morning ceremony, known only to a few friends, at the beginning of January.

MADAME CALLAS SINGS "NORMA" AT COVENT GARDEN: Maria Meneghini Callas on the stage of the Royal Opera House, Covent Garden, in the costume she wore as Norma, High Priestess of the Druids, from Bellini's opera of the same name. The work was last produced at Covent Garden in 1952 when the same soprano sang "Norma." In the recent production the part of the Archdruid, Oroveso, was sung by Nicola Zaccaria, Pollione by Giuseppe Vertechi and Adalgisa by Ebe Stignani. The conductor was John Pritchard. The opera was only played for two performances, but each was enthusiastically received.

THE NEWS IN PICTURES—II.

THE NEW GERMAN NAVY AT SEA: Seven mine-sweepers of the newly-created Federal Navy take station in line ahead during naval exercises in the Baltic off Kiel. The projected strength of the German Navy has been set at 170 ships and 20,000 men. Envisaged in the construction programme of the Federal Republic are eight destroyers of about 2,200 tons to be armed with four 5-inch or 4-inch guns. The first of these vessels will not be completed before 1960.

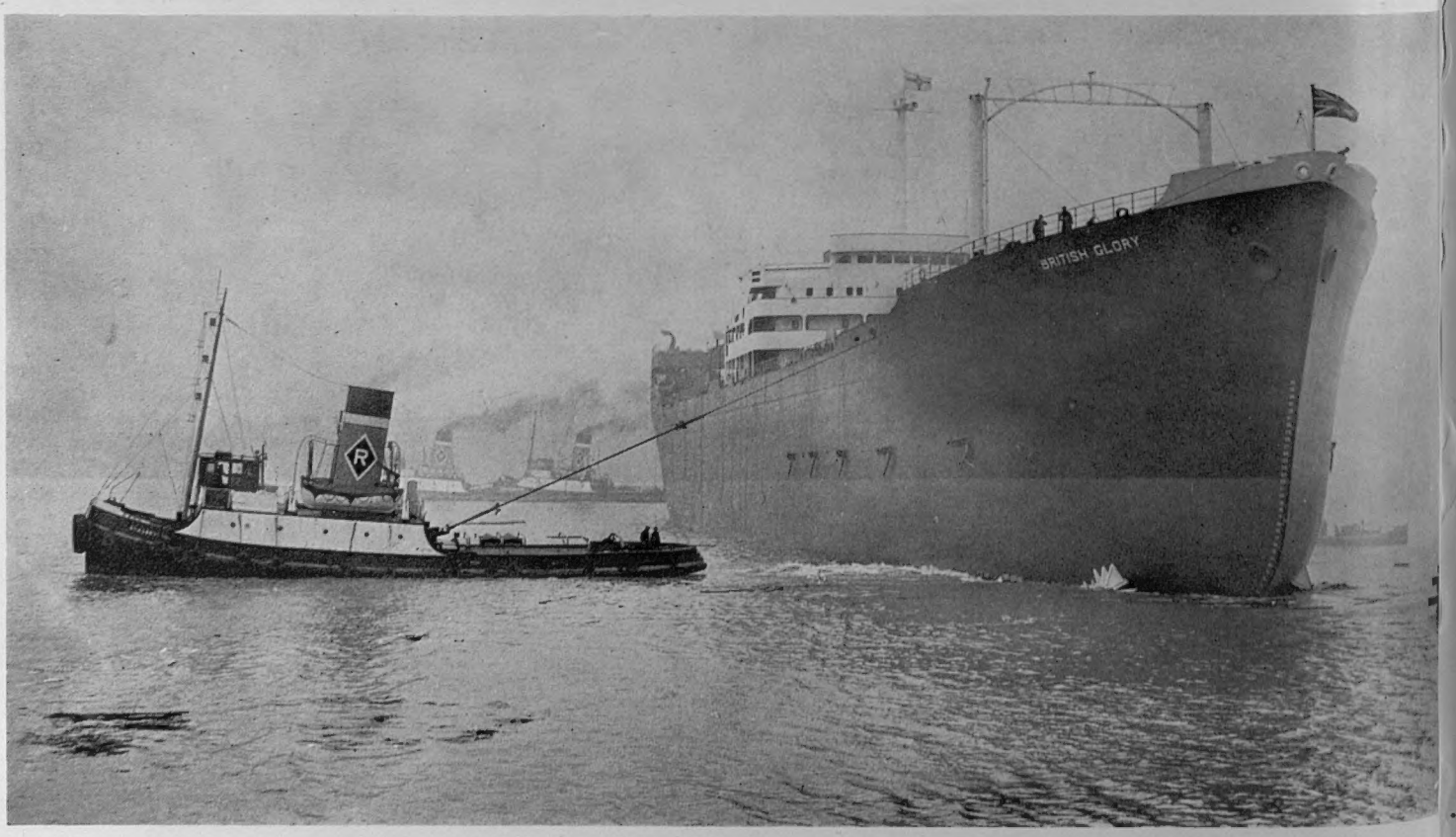
On right—

"LACROSSE" IS FIRED: A new surface-to-surface guided missile leaves its mobile launcher at the Ordnance Proving Ground at White Sands, New Mexico. "Lacrosse" is a ballistic type of missile as opposed to the "cruise"-type illustrated on p. 241. The new guided missile is intended for the U.S. Marine Corps and Army.

THE MIGHTY STERN OF A NEW BRITISH TANKER: The *British Glory* is seen on the slipway at the Barrow-in-Furness yard of Vickers-Armstrongs shortly before her launching last week by Mrs. Aubrey Jones, wife of the Minister of Supply. The tanker is the ninth of the 32,000-ton vessels to be launched for the British Petroleum Co. Ltd. Five more are to be launched for the company during the course of this year.

On right—

"BRITISH GLORY" TAKES TO THE WATER: She is expected to sail on her maiden voyage during the late spring. A sister-ship is also under construction by Vickers-Armstrongs. *British Glory* will carry crude oil from the Middle East to the refineries in Britain. At last week's launching ceremony it was stated that B.P. Tankers Ltd. were already planning further tankers for the Cape route.



On left—

AN AMERICAN FLOOD DISASTER: Floodwaters isolate the bridge over the Cumberland River at Barbourville, in Kentucky, which was one of the hardest hit areas in the recent floods in the United States. On left and in the background the encroaching waters have spread across the earth dikes and covered all the low-lying land. The flooded areas, which comprised the Appalachian Mountain coal-mining region covering four states, were designated as a "major disaster area" and aid from the Government was quickly rushed there.

Below—

A JET FIGHTER CRASHES AFTER FLYING UNDER THE CLIFTON SUSPENSION BRIDGE: Firemen stand by the wreckage of a Vampire jet fighter which crashed in the Avon Gorge near Bristol after the pilot had flown under the Clifton suspension bridge. The pilot, Flying Officer John Greenwood Crossley, aged twenty-eight, was killed when the fighter hit the side of the gorge as it tried to gain height. The crash occurred just before the Duke of Gloucester took the salute at the disbandment parade of the pilot's squadron, No. 501 (County of Gloucestershire) Squadron, Royal Auxiliary Air Force.

SCOTLAND BEAT WALES AT MURRAYFIELD: A determined tackle by a Scottish forward prevents a Welsh breakaway during the rugby international at Murrayfield, which Scotland won by 9 points to 6. The game, which was fiercely fought throughout, was marked by a superb goal dropped by the Scottish forward Dorward fifteen minutes after half time when the scores stood level.

THE THIRD TEST MATCH ENDS IN A DRAW AT DURBAN: *Left*—D. J. Insole, the England vice-captain, turns a ball from N. A. T. Adcock past W. R. Endean, who goes down in vain during the five-day Test at Durban which ended in a draw. However, there had been much excitement when South Africa had taken the lead in the first innings. Insole, who was the highest scorer, made 13 and 110 not out, his first century for England. *Right*—R. A. McLean of South Africa, with his score at 38, edges a ball from B. Statham just beyond the reach of T. E. Bailey, who dives headlong at first slip. McLean just reached his century before being caught by Insole off Bailey.

KING SAUD IN AMERICA

The Arabian Monarch's Controversial State Visit to the United States

THE ARRIVAL OF THE KING OF SAUDI ARABIA IN NEW YORK: *Left*—King Saud is welcomed by Mr. Cabot Lodge, the U.S. delegate to the United Nations, on Pier 45, in New York, at the start of his State visit to America. *Right*—The monarch of the Middle East oil kingdom comes ashore from the U.S. destroyer, *Willis A. Lee*. He had transferred into the ship from the liner *Constitution*, in which he crossed the Atlantic. The *Willis A. Lee* was accompanied up the harbour by a naval escort.

President Eisenhower stressed the importance he attached to the State visit of King Saud of Saudi Arabia by going personally to meet him at the airport at Washington. Before a crowd of about 20,000 the two heads of State greeted each other, Mr. Eisenhower speaking of his guest as "a great Arab leader" and "the custodian of the sacred cities of Islam." Political conversations began almost immediately in the White House and there was an official dinner. As a further mark of his esteem, the President arranged for Prince Mashhur to go into the Presidential suite in the Walter Reed Hospital for treatment. The boy has suffered from birth from a paralytic condition in one arm.

Since King Saud is the ruler of one of the wealthiest oil states in the world, the reasons for Mr. Eisenhower's desire to make his guest feel really welcome can be understood. The State visit was regarded as a first step in the new American foreign policy towards the Middle East. But by no means all Americans were prepared to share the President's enthusiasm. New York flatly refused to have anything to do with the reception for the king. Mr. Wagner, the Mayor, referred scathingly to "a fellow who says slavery is legal and that in his country our air force cannot use Jewish men and cannot permit any Roman Catholic chaplains to say mass." All New York did was to send a small police escort for the royal car. There were also protests against the State visit from organisations and individuals in other parts of the country.

A GUARD OF HONOUR: The King inspects men of the United States Marines on the pier in New York. All arrangements for his reception were made by the Federal Government. The City of New York would have no part in the welcome, the Mayor, Mr. Wagner, declaring that the visitor was "not the kind of person we want to officially recognise in this city."

THE PRESIDENT WITH HIS GUEST: Mr. Eisenhower drives through Washington with King Saud after meeting him at the airport. On His Majesty's knee is his son Prince Mashhur, who was taken to hospital in the American capital for treatment for his paralytic arm.

AT THE UNITED NATIONS: Mr. Hammarskjöld, the Secretary-General, shakes hands with the King at the U.N. headquarters in New York. The Middle East potentate addressed the Assembly, assuring the delegates of his loyalty to the U.N. Charter.

FOR AND AGAINST NEHRU

Marshal Zhukov in India;
Protests Over Kashmir in Pakistan

CUPS OF TEA IN DELHI: Marshal Zhukov, the Soviet Minister of Defence, is offered milk for his tea by Mr. Nehru during a meeting of the two at a National Cadet Corps rally in the Indian capital. A number of those sitting around and watching the progress of the meal heard the Marshal explain through his interpreter that he preferred his tea in the Russian style without milk. This was one of several meetings which the Soviet Defence chief had with Mr. Nehru during his eighteen-day visit to India. At a banquet given in his honour by Dr. Katju, the Indian Defence Minister, the Marshal spoke of the developing friendship between India and Russia and of "the stand taken by India in the cause of peace."

AN AIR SHOW AND AN ELEPHANT RIDE: *Above*—Marshal Zhukov gazes upwards with Mr. Nehru during a glider display at the National Cadet Corps rally in Delhi. *Below*—The Minister of Defence of the Soviet Union has an elephant ride in the grounds of the Indian President's residence.

PAKISTAN SHOWS ITS FEELINGS OVER THE INDIAN SEIZURE OF KASHMIR: Sardar Abdur Rab Nishtar, the President of the Muslim League, makes his way with an escort through the dense crowd which had gathered to hear him speak at a meeting in Karachi held to protest against the seizure by India of the long-disputed territory of Kashmir. *On right*—A street is packed in Karachi with people who gathered for one of the many mass demonstrations which have been taking place in Pakistan against India.

Ever since the partition of India and Pakistan, the status of Kashmir has been a subject of dispute between the two states of the former British India. The United Nations has repeatedly tried to find a solution to the problem, and failed. At the end of last month, Mr. Nehru offered his own answer. It was announced from Srinagar, the capital of Kashmir, that the state was to become an integral part of the Indian Union under a new constitution. This action by India was widely regarded as defiance of the United Nations and in many quarters it was held that Mr. Nehru was following the example of the Soviet Union in establishing a puppet government in a satellite state. As was to be expected, the strongest protests came from Pakistan. Numerous anti-Indian demonstrations were organised so that there could be no doubt about the feelings of the people regarding what was looked upon by them as an unwarranted act of aggression by India.

b

BUILDING A SMALL NUCLEAR PLANT IN AMERICA: A 14-ton reactor vessel is lowered into the vapour container of an Army Package Power Reactor at Fort Belvoir, Washington. Similar power plants are being put on the market under an Anglo-American agreement between construction firms. *On left*—The steel vessel is manœuvred into position over the vapour container before being lowered down.

"ATOMS FOR PEACE"

Development Goes Ahead on Three Nuclear Research Centres in America, Belgium and Japan

Under an agreement signed in London a British firm, Humphreys and Glasgow Ltd., have acquired the selling rights, outside the North American continent, of small atomic power plants of American design for the production of electricity or heat. The first of these plants, which is known as the APPR-1 (Army Package Power Reactor-1), is at present nearing completion for the United States Army at Fort Belvoir, Washington. The American firm which has granted the selling rights is Alco Products, the designers and builders of the reactor.

The Alco stations, which are to be built by the British company, will be based on a small pressurised water reactor of a type originally developed by the United States Government for the submarine *Nautilus*. Fuel will consist of about a half to 3½ tons of enriched uranium and the reactor will run from eighteen months to two years without a change of fuel elements. The supply of fuel has been guaranteed, on loan, by the United States for the life of the reactor.

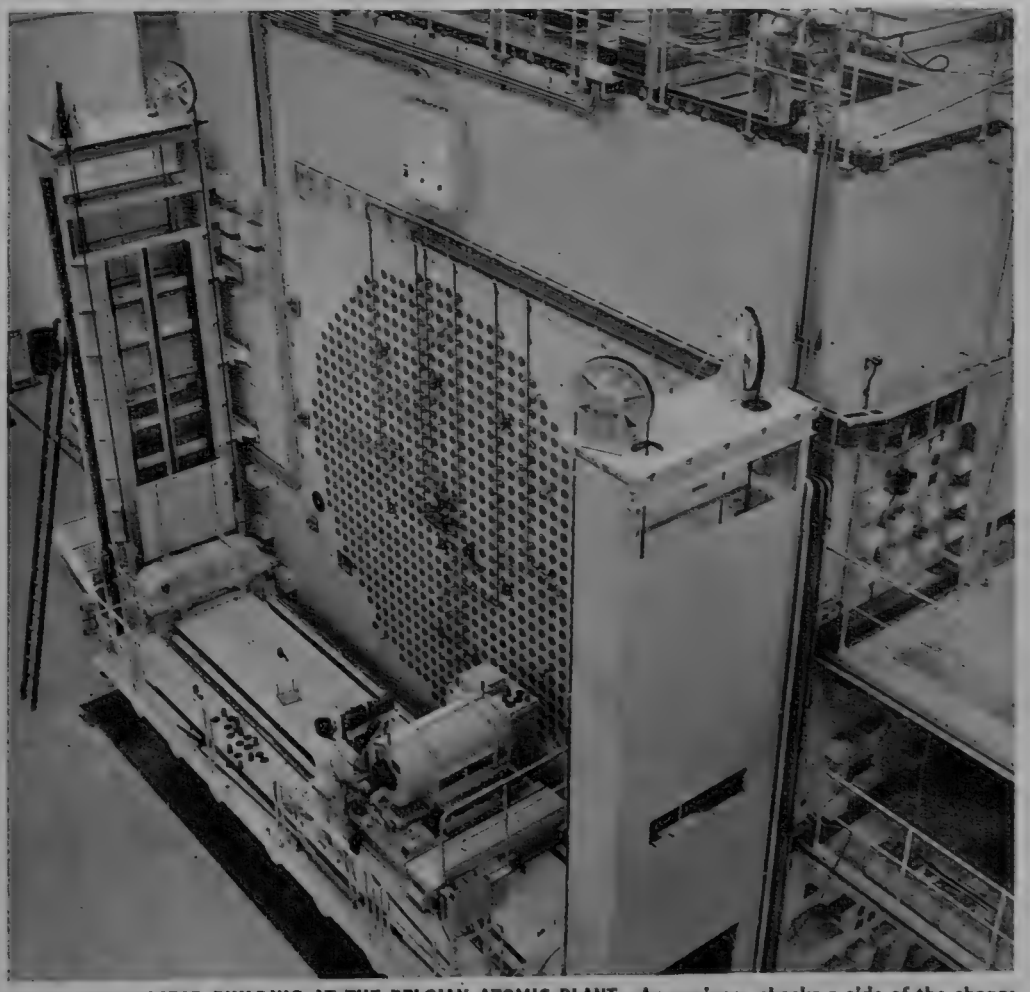
At the present moment the Alco plant is available in three sizes with respective electrical outputs of 2, 5 and 10 megawatts. Plans, however, are in hand to extend this range up to 25 megawatts. A statement, made at the time the agreement was announced in London, said that the 10-megawatt plant, which could supply a community of about 20,000 people, can be built on a site no larger than a tennis court, and is transportable. The cost of such a station would be in the region of £2,000,000.

In the early stages of business about two-thirds of the total cost of a plant ordered from the British company will be spent on equipment bought in this country. In the long term, however, it is expected that Britain will take over the complete construction of the plants and only the enriched uranium fuel will be obtained from the United States. Announcing the Anglo-American agreement, Mr. A. Cosgreve, Chairman of Humphreys and Glasgow Ltd., said that his company was most appreciative of the confidence shown by Alco Products "in giving us over half the world in which to operate and it is our intention to press forward energetically and with a sense of urgency with this task of sales and development throughout our territory." The small plants that the British company will put on the market are likely to be of particular interest to the less developed countries in the Commonwealth and elsewhere in the world. It is estimated that the electricity generated can be produced at a cost of about 1½ to 2d. a unit.

THE SITE OF JAPAN'S FIRST ATOMIC ENERGY CENTRE: The first stages of construction have begun on the site of Japan's first Atomic Energy Research Centre at Tokai, a village in Ibaraki, north-east of Tokio. The experimental plant is expected to start operation to a limited extent in June this year when the water-boiler type reactor will be started and certain subsidiary equipment set to work. The reactor and a great deal of the other equipment for the plant is being supplied by American firms.

On left—
WORKING IN A BELGIAN ATOMIC CENTRE: Personnel of the Belgian atomic plant at Mol wear these protective suits made of plastic while working in radioactive air pockets.

Below—
AN ATOMIC PLANT AMONG THE PINES: The Belgian plant at Mol, near the Louvain-Turnhout road, is isolated in a pine forest. In background can be seen the tall chimney of the graphite thermal reactor.



INSIDE THE REACTOR BUILDING AT THE BELGIAN ATOMIC PLANT: An engineer checks a side of the charge and discharge deck of the graphite thermal reactor. Built on a 475-acre site near Mol, in the province of Antwerp, the Belgian centre of nuclear research has nearly completed its first stage of development. The reactor became active on July 11, 1956. It is essentially an experimental machine since the thermal energy that it generates is not recovered and converted into a useful power. A second stage of construction is at present under consideration and will probably include the erection of a material-testing reactor with a high neutron flux. The station is also used as a study centre for all aspects of the application of nuclear energy for peaceful means. Scientists and technicians receive there specialised courses to prepare them for their part in the programmes of atomic development planned in Belgium.

b 2

PARIS APPLAUDS A NEW PLAY

Marcel Achard's Comedy is Well Received After its Opening at the Théâtre St. Georges

By GEORGE SLOCOMBE

PARIS, February.

IT is rare that a sophisticated French audience of critics and first-nighters rises to its feet to applaud a playwright for several minutes. This " standing ovation," as the Americans call it, was given to popular dramatist and wit-about-town Marcel Achard at the opening of his play *Patate*, at the Théâtre St. Georges. The event was critical for Marcel Achard, since his last few plays had not lived up to the promise of *Jean de la Lune*, and the sceptics had prophesied his early eclipse. And now he is back smiling and stronger than ever, a little stouter than when I met him at the Méditerranée Restaurant in the Place de l'Odéon at the liberation of Paris, but affable, epigrammatic, full of jests and wisecracks, a true successor to Tristan Bernard.

Marcel Achard deserves his success with *Patate*. He has both wit and humour—not always the same thing—he writes delicious dialogue full of drollery and devastating logic, and his plays are constructed soundly and solidly. There was room for a writer of good-natured and occasionally satirical comedies in France, and Achard, who has been acclaimed as a modern Molière, has filled it. With the sombre Jean Anouilh distilling brilliant and deadly philosophical poisons in one corner of the theatrical laboratory, Achard, in the other corner, is well inspired to concentrate on decocting delightful potions of laughter and humanity.

Yet *Patate* has a theme which might have tempted Jean Anouilh, although with Achard's humane treatment it turns out mercifully. It is the revelation of the hatred, envy, vanity and rancour which may lie hidden beneath a long-standing friendship between two men who have known each other since their schooldays. The two friends of Marcel Achard's play are called Rollo and Carradine. Rollo, played brilliantly by Pierre Dux, who shares with the author the laurels of the play, is the type of unsuccessful man, good-natured, unfortunate, generally popular and generally pitied, still known to his friends by his eloquent school nickname of " Potato." The other man, Carradine (the actor Maurice Teynac), handsome, condescending, generous in his relations with men and women, takes his success in love and business with an impressive but irritating insouciance. He has already deeply wounded Rollo by marrying the heiress Véronique—a marriage which laid the foundations of his fortune. Years later, when Rollo is himself married to a charming and lovely young woman played by Simone Renant, Carradine will add insult to injury by a clandestine affair with Rollo's adopted daughter Alexa (Sophie Daumier, a new and promising young actress).

Rollo now realises that fate has given it into his hands to destroy Carradine. He can, by revealing Carradine's deception to the rich Véronique, break up his marriage and seriously endanger his financial security. He is dissuaded from using his new power by the arguments of his wife, and by his adopted daughter's sudden decision to break with Carradine and elope with a younger lover. All ends well, with the two friends superficially reconciled, and their domestic situations more tranquil than ever.

Patate, after a triumphal opening and an enthusiastic Press, and given a title which is itself a publicity slogan, has settled down to a long run, and its author is assured by his well-meaning fellow-dramatist and French Academician Marcel Pagnol of a seat in the Académie Française.

PIERRE POUJADE HOLDS AN ELECTION MEETING IN PARIS: The anti-tax leader speaks from the rostrum during a political meeting held in the Palais des Sports on the eve of a Paris by-election in which he was standing as a candidate. The result of the voting was a win for M. Julian Tardieu, a conservative supporter of the Mollet Government's policy of " No abandonment of Algeria." Pierre Poujade gained only 19,906 votes, 6.4 per cent. of the total vote.

There is rejoicing in Savoy, Dijon and Geneva over the French decision to build the Mont Blanc Tunnel. There is some eyebrow-lifting in Paris at the practical unanimity of the vote in the National Assembly (even the Communists voting in favour), but there is no real surprise. French national pride is touchy since Suez, and once the Italians had let it be known that if the French refused to go ahead with the Mont Blanc project (which had been agreed since 1952 and only awaited Parliamentary ratification), Italy and Switzerland would build a tunnel under the Grand St. Bernard, the conclusion of the debate was no longer in doubt. For although the French do not expect to gain in enhanced tourist traffic the full fruit of their financial participation in the Mont Blanc Tunnel, under the Grand St. Bernard scheme they would have gained nothing at all, and the whole of the tourist traffic through the Alps would have benefited Switzerland and Italy exclusively. As it is, whereas the Italian Riviera will profit, and the French Riviera will lose, by the building of a tunnel under Mont Blanc, the French province of Savoy and the town of Chamonix will share in the great wave of tourist prosperity which is expected to unfurl from the icy north of Europe towards the lands of the sun.

It is estimated that 10,000,000 tourists migrate every year from Northern Europe to seek the sunshine of Southern France, Switzerland and Italy. And the migration grows in volume by 10 per cent. annually. The Mont Blanc Tunnel is expected to be built in three years and should be open to traffic in 1960. It will be roughly 7½ miles long, with a road track 23 ft. wide. Cars and passengers will pay a toll. The direct road from Britain to Italy via Mont Blanc will pass by Calais, Paris, Dijon and the Col de la Faucille. Before it enters the tunnel, the road will run for several miles through Swiss territory.

ICE ON THE SEINE: A river barge lies moored among broken ice near the lock gates at the Quai de Jemmapes in the capital. During this cold spell which hit Paris in the middle of January the day temperature was sometimes as low as 30 degs. F. The spell lasted for several days before a change in the weather brought warmer temperatures and rain.

The rumour that exception might be taken in rigorous British circles to the Pompadour Bedroom reserved in the Presidential palace for the Queen on her visit to Paris in April can only be dismissed as fantastic. Two generations of British sovereigns—King George V and Queen Mary, George VI and Queen Elizabeth—have enjoyed the hospitality of the Elysée and no question has ever been raised as to the personality of the brilliant and intelligent woman who once lived in the palace. Madame de Pompadour, the most celebrated of the mistresses of Louis XV, was an assiduous and devoted patron of the arts. Several schools of poets and painters, architects and decorators followed her sometimes capricious and often sound inspiration. The style and furnishings of the Elysée have changed a dozen times since Madame de Pompadour lived there, and there is no evidence that the original furniture has survived the upheavals of the Revolution, the Empire, the Restoration, the Second Empire and the Third and Fourth Republics.

The Queen and the Duke of Edinburgh have already been entertained at the Elysée—on the occasion of their visit during Vincent Auriol's presidency. If they then found the Elysée transformed from the intimidating museum of rather dingy gilt and plush in which the Queen's parents had been entertained just before the war, it was due to the dexterous touch and modern spirit of Madame Vincent Auriol, and the young decorators who advised her.

The furnishings of the Elysée have not been radically changed since the Auriols departed. It may be whispered, to assuage the feelings of ultra-Puritans in Great Britain, if they any longer exist, that the bed in the Pompadour bedroom is no more authentic than the many hundred beds in Britain ascribed to the first Queen Elizabeth. It comes, like all the furniture in French State residences, from the Mobilier National, or State furniture repository, and the ghosts of Louis XV and the Pompadour have not been seen there for a long time.

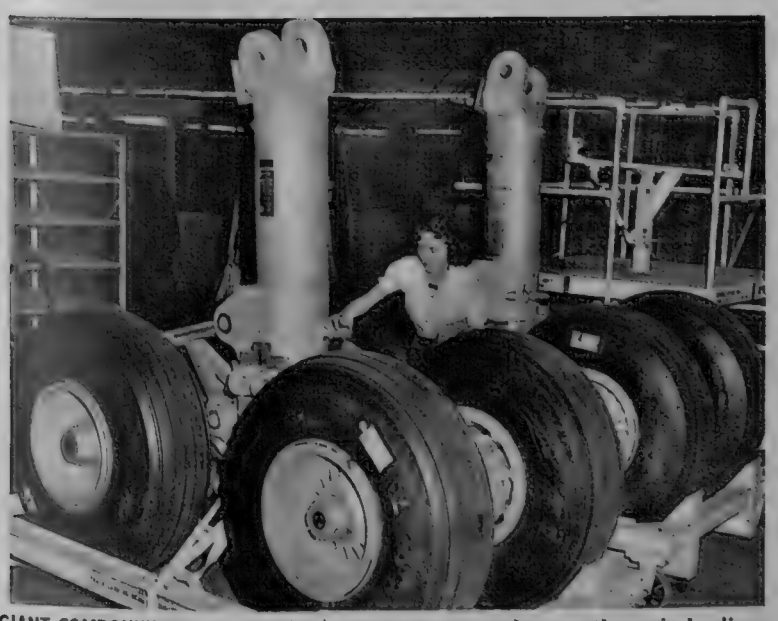
A REMARKABLE TRANSATLANTIC FLIGHT: The first of the Bristol 310 series Britannias takes-off from Filton, Bristol, for Prestwick, Scotland, where it began a 3,800-mile non-stop flight to Winnipeg. This is probably the longest westbound flight ever made by a civil airliner carrying a reasonable payload. The flight took 10 hours 52 minutes—an average speed of 366 m.p.h. Wing-Commander Walter Gibb, Bristol's Chief Test Pilot and holder of the world's altitude record, reported good weather all the way and enough fuel in reserve for another 1,200 miles. On board were Mr. Peter Masefield, Bristol Aircraft's managing director, and forty-five crew members and technicians with luggage and equipment. The aircraft will undergo five weeks of routine cold weather trials in Canada. Tests will be made in temperatures as low as minus 20 deg. C. on the ground, and minus 70 deg. C. at high altitude. The Britannia 310 series will, within two years, be on regular non-stop services across the Atlantic; the version has been ordered by B.O.A.C., El Al Israel Airlines and Canadian Pacific Airlines.

NEWS IN THE AIR

Recent Items of Interest from Britain, Canada and the U.S.

A WREN RE-HATCHED: A reconditioned English Electric Wren, first built at Preston, Lancs, in 1922, flies over Warton airfield, Cheshire. The pilot, Mr. Peter Hillwood, who is in charge of the project, has been advised by Mr. W. O. Manning, the aircraft's original designer. The Wren was for some years in the Science Museum at South Kensington, and much of the old airframe remains.

On left—
NO MEAN SKID: Two inches of rubber was burned from the tyres of this airliner in a recent emergency landing at Winnipeg, Canada. The tyres finally deflated but not until the twenty-six passengers on board had safely disembarked.



GIANT COMPONENTS: A mechanic checks the part numbers on the main landing-gear units of KC-135 jet tanker aircraft. The operation is taking place at the Boeing Airplane Company's Transport Division at Renton, Washington.

STARFIGHTER UNWRAPPED: This is the first unrestricted picture so far released of the Lockheed F-104A Starfighter. Previous photographs had the jet intakes blacked out. This is because the intakes of the Starfighter are believed to be among the most advanced so far developed. At speeds in excess of about 1,200 m.p.h. shock waves obstruct the solid flow of air through an intake. The half-conical, "double-shock" intake on the F-104A moves backwards and forwards to produce the precise shock-wave angle for required speeds. The F-104A Starfighter is in quantity production in California, together with a two-seater version. It is expected to enter service with the Key Defence Command Squadron of the U.S.A.F. in the near future. It is claimed that the Starfighter can climb as fast as it flies horizontally.

CLIFFS AND HOUSES

Stronger Sea Defences; a Church Demolished; Houses Extended or Restored

On left—

SELSEY BILL'S FIGHT AGAINST THE SEA: The low-lying coastline of the Sussex promontory juts out into the Channel. Some of the stretches of reinforced sea wall which have been constructed over the last three years as a defence against the ravages of the sea can be seen in the centre and centre right of the picture. The fight against erosion becomes extremely critical in the early summer of each year when the spring tides threaten the low coastline. In the undefended areas the sea comes in unchecked and takes possession of anything up to 25 ft. of the land a year. The task of holding back the sea has been made all the more difficult because it has been proved that protection at any one point on the peninsula can only be achieved at the expense of erosion elsewhere.

On right—

EXTENSIONS TO A ROYAL RESIDENCE: Work on the additional building to Birkhall, a Royal house near Balmoral, in Scotland, is nearing completion. The original house, dating from 1715, is on the right. It was at Birkhall that the Queen and the Duke of Edinburgh spent part of their honeymoon in November 1947.

Below—

OLD BIRKHALL: To the eighteenth-century house an annexe was added later. Birkhall was bought for the Prince of Wales (later King Edward VII) in 1852 and was for many years his Deeside home. For over a century it has been held in great affection by the Royal Family and at one time was occupied by King George VI and Queen Elizabeth.

THE SCENE OF AN ELIZABETHAN TRAGEDY: Arden House is a famous Elizabethan building in Faversham, Kent. Here Thomas Arden, Mayor of Faversham in 1547, is said to have been murdered by his wife. The story was the basis of the drama *Arden of Faversham*, which was once claimed to be a work by Shakespeare. It is reported that the house will shortly be restored.

STRENGTHENING THE DEFENCES AGAINST THE SEA AT SELSEY BILL: This picture taken from the air shows the new sea defences along a coastal stretch near Selsey Bill, in Sussex. The work has been going on over a period of three years and is now nearing completion. During this century the coast within a mile of Selsey Bill has lost more land to sea encroachment than any other place in Britain. Within the past twenty years more than 34 acres of the low coastline have been submerged.

AN HISTORIC HOUSE NEAR HORSHAM IS BEING RESTORED: Lady Anne Lytton's house, Newbuildings Place, near Horsham, Sussex, is to be restored and preserved under the Historic Buildings and Ancient Monuments Act of 1953. The house is chiefly remembered to-day because of its association with the present owner's grandfather, Wilfrid Scawen Blunt (1840-1922), poet, traveller, and breeder of Arab horses.

CHICHESTER WILL LOSE TWO OF ITS CHURCHES: The Roman Catholic church of St. Richard is one of two churches which are to be demolished in Chichester. The other is the Anglican church of St. Peter-the-Less. St. Richard's will be pulled down as soon as the new church in Market Road is completed. Demolition work on St. Peter-the-Less should begin within the next few weeks. The interior furnishings have already been cleared.

REJOICING OVER THE RETURN OF AN ISRAELI WHO WAS HELD A PRISONER OF WAR BY EGYPT: Dancing, in the centre, in the circle with his mother, father and young bride, is Jehoshua Anikster. Around them are others joining in the celebration, which was an impromptu occasion after Anikster had been returned with three other Israeli prisoners from captivity in Egypt. *On right*—Anikster and another of the prisoners, Shimon Chana, talk with Mrs. Vera Weizmann, the Chairman of the Red Shield of David (Red Cross) and the widow of the late Chaim Weizmann, first President of Israel. She had come to welcome them on their return home. The four men were the only Israelis whom Egypt could hand back against the 5,881 officers and men of the Egyptian Army captured by the Israelis in the exchange of prisoners from the recent Sinai campaign. The returned Israelis, on their arrival in their homeland, alleged that they had been tortured by the Egyptians. One of them, Lieutenant Etkes, an air force pilot, was examined by three doctors in the presence of a New Zealand officer of the United Nations Emergency Force. The Israeli Government drew the attention of the International Red Cross and of foreign diplomatists in Israel to these alleged outrages, and it was reported that a protest was being prepared for the consideration of the United Nations.

ISRAEL ALLEGES TORTURE OF P.O.W.S

The Four Israeli Prisoners of War Returned from Egypt Declare they were Tortured in Captivity

RECORDING ALLEGED VIOLATIONS OF THE GENEVA CONVENTION: Lieutenant Jonathan Etkes (speaking into the microphones) is interviewed in Jerusalem. This air pilot alleged that the Egyptians had thrust burning cigarettes into his nostrils and ears.

FOUR AGAINST THOUSANDS: From left are Etkes, Anikster, Rosenberg and Chana. Etkes was captured by the Egyptians in Sinai. The others had been taken earlier. They were all Egypt could offer against the 5,881 prisoners held by Israel.

HOPE COMES TO THE PEOPLE OF THE HOLY LAND: This picture is now part of the history of the modern State of Israel. It shows the head of the column in which General Allenby walked entering through the Jaffa Gate into Jerusalem after the British victory over the Turks in 1917. In that year the Balfour Declaration promised British support for a Jewish National Home. For thirty years after the end of Turkish rule in Palestine, Britain administered a Mandate over the Jews and Arabs. Then, in 1948, modern Israel came into being.

PALESTINE AND ISRAEL: The old territory of Palestine ran from the Gulf of Aqaba on a line almost due north to the Dead Sea and up the Jordan to Lake Tiberias and beyond. The new Israel lost part of the central area to Jordan and the Gaza strip to Egypt.

ISRAEL—TO-DAY and YESTERDAY

A Survey of the State which, Since its Creation Nine Years Ago, has Been a Centre of World Crisis and has Overcome Staggering Difficulties

By STEWART THOMSON

THE State of Israel has many claims to distinction but none more palpable than the mere fact of its survival. It is committed to an immigration policy that would stagger most older countries and has an adverse trade balance that seems insuperable. Two-thirds of its territory, which is smaller than Wales, is waterless desert. Ever since the Republic was established—in 1948—it has been in a state of either open war or uneasy truce with its neighbours, none of whom recognises its existence. And it is appallingly vulnerable.

Only on the short northern boundaries with Lebanon and Syria is Israel protected by mountains. Along much of the 300-mile border with Jordan, the Arabs command the foothills overlooking the Israel settlements in the flat plain below; at one point—the small town of Qalqilya—the Jordanians can look across a mere fifteen miles of Israel to the Mediterranean. In the south, on the other hand, the sandy desert with its shallow wadis provides admirable opportunities for Egyptian commando raiding.

Crossing direct from Israel to Jordan, or vice versa, is a tragi-comic experience; the Arabs will not accept a passport which carries an Israeli visa. So the first formality for any traveller who wishes to pass from Israel to the Arab world, or vice versa, by any route whatsoever is to obtain a second, short-term passport for Israel. The direct crossing, which can only be made through the Mandelbaum Gate, in Jerusalem, requires the special permission of the Jordan and Israel authorities.

The visitor must, however, remember to change passports as he walks across the brief stretch of no-man's-land between the Jewish and Arab border-posts. If he forgets, the Jews will be highly amused, but the Arabs will almost certainly turn him back. To the Arabs—or at least the more militant of them—the very word "frontier" is anathema because it implies a degree of permanence which borders on recognition.

However unrealistic and even ludicrous some symptoms of Arab hostility towards the Jews may appear to the outside observer, they represent a deep-seated and complex emotion which it would be foolish to underrate. For its roots go much farther than the defeat inflicted by the Jews on the Arabs eight years ago. The various armistice agreements which brought the Palestine War to an end in 1949 not only settled no problems, except that of open hostilities, but created new ones in an undefined armistice line and a vast concentration of Palestinian refugees along Israel's borders. These, however, merely aggravated the long-standing bitterness of the Arabs towards the very conception, not to speak of the accomplished fact, of a Jewish State.

Ever since the flight from Egypt to Palestine and the subsequent dispersion in the second century of the Christian era, the Jews had cherished the dream that one day they would return to the Holy Land. Sporadic waves of anti-Semitism and pogroms in Europe kept the dream alive. But for centuries, Palestine was part of the Ottoman Empire, and it was not until the late nineteenth and early twentieth centuries that the dream began to take practical shape and to have prospects of realisation. Theodore Herzl's book, *The Jewish State*, gave a new

(Continued on following pages)

THE FIRST PRESIDENT OF MODERN ISRAEL: Dr. Chaim Weizmann, the great Zionist leader, was the first President of Israel from 1948 to 1952.

THE PRIME MINISTER: Mr. David Ben Gurion was elected Prime Minister in 1948, resigned in 1953 and returned to office in 1955.

TWO STAGES IN THE VIOLENT AGITATION FOR THE ESTABLISHMENT OF A JEWISH STATE: *Left*—A mass procession of Jewish ex-servicemen demonstrates in Jerusalem in May 19[illegible] and were demanding the implementation by the British of the terms of the Balfour Declaration. There were wide-spread civil disturbances after this demonstrati[illegible]n. Ri[illegible] the explosion of a time-bomb in 1946. In the building, which was a British headquarters, 106 people were killed and forty-six injured. Jewish and Arab violenc[illegible]

BRITISH TROOPS ON THE WATCH: Machine-gunners are stationed on a hill overlooking the plains of Galilee in 1938. Arabs were causing trouble in the area.

THE END OF THE BRITISH MANDATE: Colours are dipped and troops stand at the salute as the armed convoy carrying the High Commissioner drives out of Jerusalem on May 14, 1948. After thirty troubled years, the Mandate was ended.

THE NEW ISRAEL IS BORN IN VIOLENCE: [illegible] night in July 1948. Within 24 h[illegible] of Israel had been proclaimed.

ISRAEL—TO-DAY AND YESTERDAY

(*Continued from previous page*)

impetus and purpose to the Zionist movement, and the Ottoman Empire showed signs of crumbling.

By the time the Ottoman Empire collapsed and Allenby entered Jerusalem in 1917, a number of Jewish settlements had already been established in Palestine with the help of such powerful families as the Montefiores and the Rothschilds. For the most part the first immigrants were refugees from Russia. But the two main threads in the pattern that was to become the State of Israel were now closely interwoven.

The Balfour Declaration of 1917, which promised the British Government's support for a Jewish National Home, expressly recognised that the Jews were not only entitled, as refugees, to a home in Palestine but also to assume a nationality of their own. Part of the mandate given to Britain by the Allied Powers, after they had adopted the Balfour Declaration, was to implement this dual principle.

There is no space here to consider the pros and cons of the highly controversial period that followed in Palestine. The British Government's policy was, in simple terms, to reconcile as far as possible the rival claims of Arabs and Jews to a territory which at some time or other in history had belonged to both. The British were encouraged amongst other things by an agreement reached between Jewish and Arab leaders in 1919, which declared: "All necessary measures shall be taken to encourage and stimulate immigration of Jews into Palestine on a large scale and as quickly as possible . . ." What most Arabs would not contemplate, however, was the establishment of a separate Jewish nation or State.

Before and after the Second World War this fundamental divergence between Arabs and Jews led to increasing bloodshed, and the British Government decided to relinquish the mandate. The United Nations General Assembly, after sending out a special commission to examine the situation, decided in November 1947 that Palestine should be partitioned between Arabs and Jews. Although the division suggested would probably have proved impracticable in certain details, it at least offered a basis for settlement, and the Jews accepted it. But the Arabs were opposed to any form of compromise that meant accepting a Jewish State.

When the last of the British troops and administration finally withdrew at midnight on May 14, 1948, the Jewish leaders proclaimed the new State of Israel. Twenty-four hours later the Arab armies attacked it. Early the following year, when the first of the Arab-Jewish armistice agreements was signed, Israel had not only beaten off the invaders, she had acquired considerably more territory than was envisaged in the General Assembly's Partition Plan. As a result, the two sides have reversed their views. The Arabs now insist that the Partition Plan be implemented, while the Jews regard it as out-dated by events.

The Jews had other reasons than that of conquest to hold the territory they had acquired, for, in proclaiming the new State, they assumed a heavy but inevitable commitment. They guaranteed that any Jew wishing to emigrate from the countries of the dispersion would be automatically admitted. The steady stream of immigrants—legal and illegal—during the mandatory period had already imposed a serious burden on the country's limited resources. Yet the new State had no choice but to abide by the Zionist principle of a National Home.

From the outset, therefore, Israel has been dependent on foreign subsidies, principally from the Jews in America, and even her phenomenal agricultural and industrial development has been largely cancelled out by the flow of immigrants. Since 1948 Israel has trebled the area under irrigation but its population has nearly doubled, and a large percentage of the immigrants are unskilled.

Israel's two major handicaps have been a shortage of natural resources, principally water, and of skilled labour. These, together with the constant need for military preparedness, have meant that Israel's economy has always been organised on an emergency basis. Any clear separation between defence and economic development is impossible. For example, about one-sixth of the working population is engaged in agriculture, but agricultural workers in the outlying settlements are armed and constantly on the alert. Last spring I visited the settlement of Yad Mordechai on the edge of the Gaza strip. Every night the pipes that irrigate the surrounding fields were dismantled and reassembled in the morning. Through the night the perimeter was manned by guards and illuminated by searchlights.

The dual need for development and defence has influenced not only the agricultural settlements but also the Army. Conscripts spend part of their time in agricultural training, and the Defence Forces have played a considerable part in the road-building

Those taking part were reported to number 45,000
The King David Hotel in Jerusalem lies in ruins after
ncreased in the last period of the British Mandate.

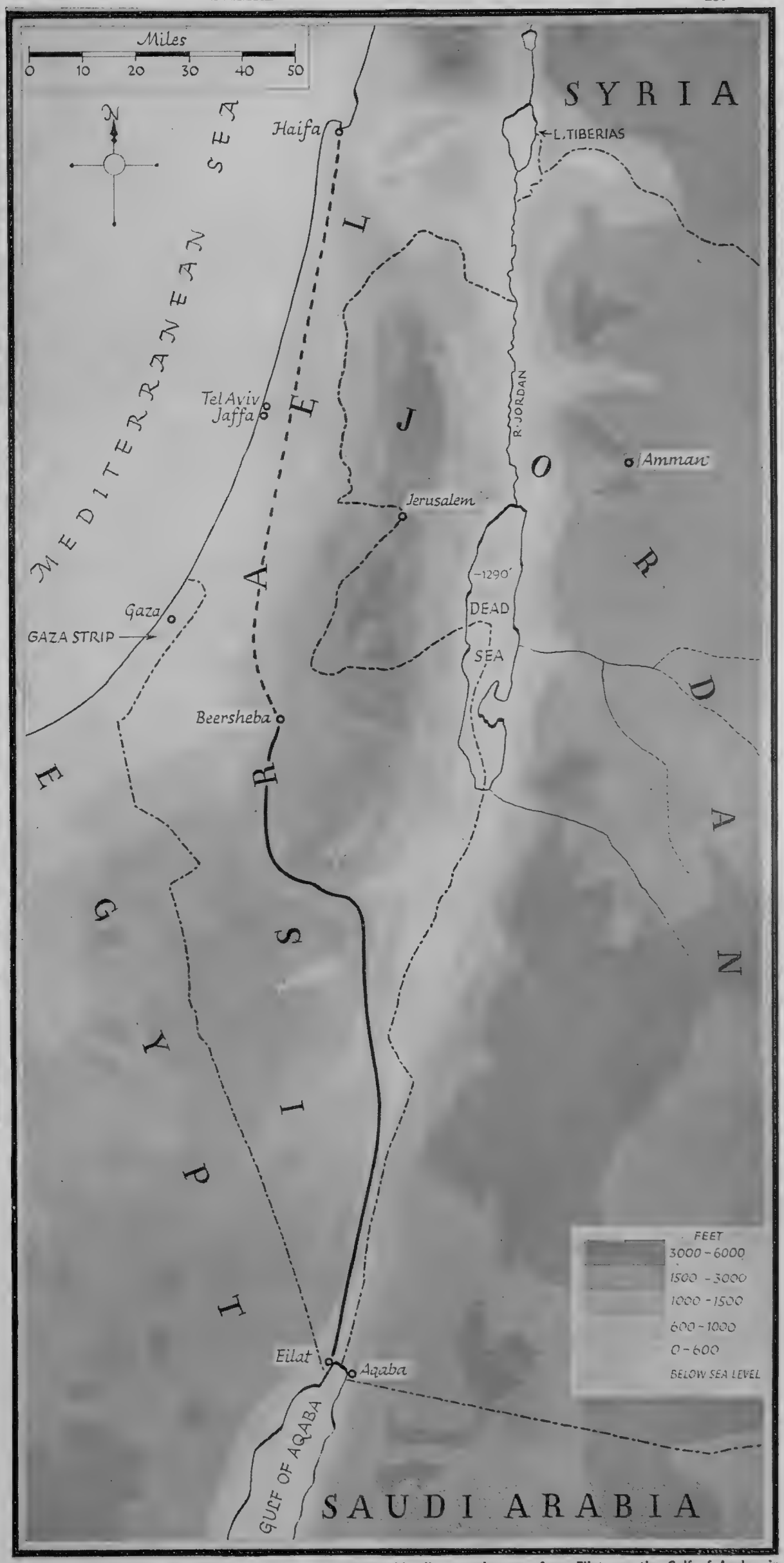
The Jerusalem skyline is lit by the flash of guns during a
s of the British departure in the previous May, the State
lext day the new State was invaded by Arab armies.

programme. But Israel's chronic state of emergency has inevitably conditioned the whole of the country's political and economic structure. Western standards of wages and political conduct have been accepted as the norm from the beginning, although this has involved an intensive process of education and adjustment where most of the immigrants are concerned. But even more formidable has been the problem of upholding the democratic way of life in a state of emergency and of maintaining a high standard of living in an inflationary economy.

Much of Israel's political stability has undoubtedly been due to the personality of her Prime Minister, Mr. Ben Gurion, and to the fact that his Left-Wing Party, Mapai, has formed the nucleus of all Israel's governments. But Mapai's main strength lies in the predominant position it holds in the labour federation, Histadruth, which wields vast power both through the trade unions and through its many industrial enterprises and co-operatives.

Half of the workers in Israel's public works and building are employed by either the Government, the municipalities or Histadruth. One-third of Israel's industry is controlled either by the Government or by Histadruth. The Government—and principally its leading party, Mapai—is therefore constantly torn between the obvious need for wage restraint and the demands of its trade union leaders for higher wages.

(*Concluded on following page*)



ISRAEL AS A VITAL LINK IN THE WORLD'S OIL SUPPLIES : The line on the map from Eilat, on the Gulf of Aqaba, in the south, to Beersheba, in Central Israel, shows the route of the 8-in. pipeline now being laid by the Israelis. This will carry oil for domestic purposes brought by tankers to Eilat. There are also plans for making a large pipeline from Eilat to Beersheba and carrying it on—as shown by the dotted line on the map—to Haifa. This would mean that Israel could carry across its territory some of the oil which used to go through the Suez Canal.

THE END OF TERRORISM: A soldier of the Israeli Army carries arms from a Jerusalem armoury of the Jewish terrorist organisation, Irgun Zvei Leumi, in 1948. The terrorists were disbanded by the Israeli Government because of the murder of Count Bernadotte, the U.N. Middle East mediator.

COMMUNIST PROPAGANDA IN NAZARETH: A portrait of Stalin looks down from a wall in the Holy City. It was posted there some weeks before the municipal elections which were held in 1954.

ISRAEL—TO-DAY AND YESTERDAY

(*Concluded from previous page*)

In the first half of last year Israel's exports represented less than one-third of her imports.

This enormous gap has so far been filled by foreign subsidies and more recently by German reparations payments, but these sources are bound to dry up sooner or later. The Governor of the Bank of Israel expressed his confidence, when I interviewed him a few months ago, that Israel could close the gap in the foreseeable future. One of the conditions he laid down was that wages should no longer be tied to the cost of living.

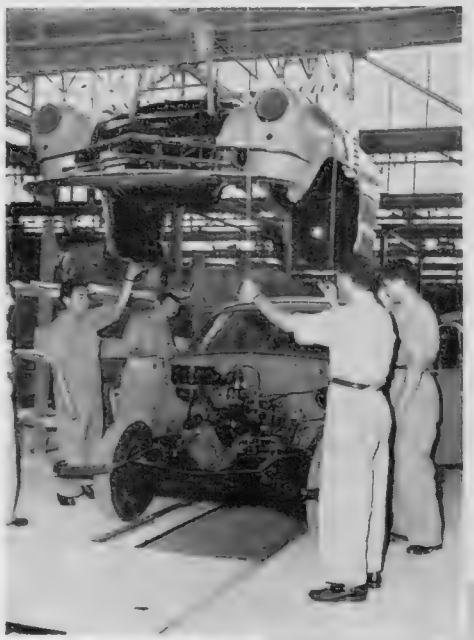
But there are other conditions which will also have to be fulfilled before Israel can hope to achieve anything like economic independence. Chief among Israel's requirements is irrigation. Almost the entire cultivable area north of Beersheba has been made productive, with the main stress on citrus fruits, principally oranges. But the Negev, south of Beersheba to the port of Eilat, is still largely untapped. Its development is of the utmost importance to Israel economically and politically. As one Israeli remarked to me: "Either we must reclaim our land in the south or expand in the east." Yet it is in the east, in Jordan and Syria, that Israel's plans for reclaiming the Negev have so far been blocked.

Various schemes have been drawn up to use the River Jordan for irrigation in either Israel or Jordan or both, but any plans that involved joint use of the Jordan water by both Arabs and Jews have been rejected by the Arabs as implying recognition of the State of Israel. Agreement was reached in the summer of 1955 between four countries concerned—Syria, Lebanon, Jordan and Israel—on a technical level, but what has become known as the Johnson Plan was accepted only by Israel on a government level. This conflict between Israel's economic needs and the political intransigence of the Arab States has never been resolved.

During the past year, in fact, it has been aggravated. Again the root causes go deep. A crucial factor, ironically enough, was the decision of King Abdullah of Jordan, who ranked as a moderate in the Arab-Israel dispute, to give the Palestinian refugees on the west bank of the river Jordanian citizenship. They, therefore, became not only numerically but also politically the dominant element in Jordan. With the emergence of Colonel Nasser as a pan-Arab champion, their influence grew by leaps and bounds. The dismissal of General Glubb from the Arab Legion brought an immediate recurrence of raids and counter-raids along the Jordan-Israel border after months without incident.

This renewed unrest along Israel's eastern border was accompanied by a succession of Egyptian commando attacks from the Gaza strip. Colonel Nasser's long-standing blockade on Israeli shipping in the Suez Canal and the Gulf of Aqaba, which many Arabs regard as a legitimate defence measure, had become something that was, if not overt, at least covert aggression. Coupled with his Soviet arms deal, it represented an immediate, even daily, threat to Israel.

Seen against this background, the Israeli invasion of Egypt last October was directed against the two main pillars of Arab anti-Israel policy: the blockade that has been imposed on Israel by land and water ever since the Palestine War and the more recent and more offensive tactics employed by Egypt. The guarantees Israel is demanding from the United Nations concerning the future status of the Gaza strip and the Gulf of Aqaba are, for her, a matter of life and death.



INDUSTRIAL DEVELOPMENT: A car is assembled in the assembly plant of the American firm, Kaiser Frazer, in Haifa. All over Israel development is going ahead in industry and agriculture. Among the country's exports are motor tyres, paper, cotton yarn from home-grown plants, cut diamonds and a variety of fruits.

A STAPLE INDUSTRY: Oranges are packed for export in Gaza. Israeli trade is being carried on through the town which was captured by the forces of Israel in the campaign of last November.

On right—
LAYING A PIPELINE: A section of the oil pipeline from Eilat, on the Gulf of Aqaba, to Beersheba is prepared for laying. The line will be 140 miles long. It is planned that the project, which was only begun after the Israeli rout of Egypt last autumn, should be completed by next month.

It might, of course, be argued—and certainly is by Israel's critics—that the Israeli Government is also motivated by ambitions to expand its territory. That these ambitions exist, especially as regards Jerusalem and the west bank of the Jordan, is true, but whether they enter into Mr. Ben Gurion's policy is another matter.

Israel's treatment of the not inconsiderable Arab population that remained has been enlightened and progressive within the limitations imposed by the emergency. And she might, as part of a general settlement, consider taking back a percentage of the 900,000 refugees. One indication of her willingness to break the deadlock was the decision to release the blocked funds belonging to Arab refugees. But there is little or no prospect that the Israeli Government would cede any of its present territory. And an essential part of any settlement reached would have to be some change in the status of Jerusalem.

The continued division of the city and the isolation of most of the Holy Places, including the Wailing Wall, in Jordan territory is something the Jews can never accept. The Zionists took as their motto the words of Psalm 137, "If I forget thee, O Jerusalem, let my right hand forget her cunning." Of all the issues confronting the State of Israel none is such a compound of religious sentiment, nationalism and prestige. For the concept of the Jewish National Home will only be fully realised when the Holy Places are at least freely accessible to the inhabitants of Israel and to Jews throughout the world.

SAFETY FIRST ON A NEW BY-PASS ROAD FOR A MAIN INDUSTRIAL ROUTE: The pedestrian tunnel seen in course of construction in the centre of the picture will eventually pass under the new by-pass road which is being built to take the traffic stream away from the narrow main street of the Hertfordshire village of Markyate. The new by-pass is expected to be opened in mid-summer. Until then the village street, which has a width between kerbs of 16 ft., will continue to form part of the main road (A.5) from London to the Midlands. Markyate has become a bottleneck and lorries using the road have had to crawl through it.

PROGRESS AT MARKYATE

The New By-Pass is Expected to be Opened in the Summer

On left—

AT WORK ON THE ROAD: It cuts across fields and copses behind the main street of the village. At present there is a speed limit of 15 m.p.h. through the village street and the villagers have been most insistent that this limit should be strictly enforced.

BY-PASSING THE VILLAGE: *Left*—An A.A. Patrol is about to pass the point where the new by-pass road joins the main road through the village, which is seen in the background. *Right*—Work is in progress on the strengthening of an embankment along the new road, the construction of which was begun in November 1955. The inhabitants of Markyate have been most anxious for the new by-pass as they consider that the narrow main street through the village is a "death-trap."

SHIPPING NEWS

A Survey of Recent Events in World Shipyards; and a Mediterranean Ferry-boat Aground

A NEW TANKER FROM MESSRS. HARLAND AND WOLFF'S BELFAST SHIPYARD: The S.S. *Missouri*, a new oil tanker of about 28,000 tons deadweight, carries out her sea trials before being handed over to her owners, the Texas Company (Panama), Incorporated, of New York. She is the first of two sister ships which Messrs. Harland and Wolff are building at Belfast for the same owners.

The *Missouri* is a single-screw, steam-turbine, oil tanker with an overall length of 630 ft. Her breadth is 84 ft. and her depth 44 ft. The vessel, including its equipment and propelling machinery, is built under the special Survey and Classification of Lloyd's Register of Shipping for carrying petroleum products in bulk. She is of the three-island type forecastle, bridge and poop, with a curved, raked stem, cruiser stern, and one complete deck. The propelling machinery is located aft. It consists of a single-shaft arrangement of compound, double-reduction geared turbines made by Harland and Wolff, capable of developing 12,500 service s.h.p. at a propeller speed of 100 revolutions per minute.

SYDNEY'S NEW FERRY-BOAT: A new type of ferry is taken for an official demonstration trip in Sydney Harbour, Australia, before being introduced into service. The ferry, which has no open decks, can carry 215 seated passengers and sixty standing. In the background is the skyline of the city's Circular Quay. Right background is the half-completed Qantas Building, and at left are the nearly finished offices of Imperial Chemical Industries.

THE "BANCINU" AGROUND IN MGARR HARBOUR, GOZO: The ferry linking Malta and the neighbouring island of Gozo lies awash near the rocks. The same storm which caused this disaster also swept away the entire fishing fleet of fifteen vessels in a neighbouring village and caused havoc along the island coasts.

On right—
A MEDITERRANEAN FERRY AGROUND: The Malta-Gozo ferry-boat *Bancinu* (348 tons) lies on its side in the little harbour of Mgarr, on the island of Gozo. She broke from her moorings after a severe gale and was swept on to the inner rocks of the harbour where she went aground with her port side under water. One man, the watchman, who was on board, was found to be missing, presumed drowned. The high winds and torrential rains also caused severe damage throughout the island.

On left—
THE "T.M.T. CARIB QUEEN" ARRIVES IN NEW YORK: The world's largest trailer ferry, the 8,039-ton *T.M.T. Carib Queen*, enters New York harbour from Jacksonville, Florida, before beginning her maiden voyage across the Atlantic to inaugurate a new trailer ferry service to Europe. The vessel, owned by T.M.T. Trailer Ferry, Incorporated, is at present under charter to the Military Sea Transportation Service of the United States Army.

BUSY DAYS FOR THE HORSE-DEALERS: *Left*—A horse is brought forward for auction at the 257-year-old horse market at Southall, in Middlesex, where business is brisk in view of the increasing demand for horses to take the place of petrol-driven vehicles. The auctioneer, Mr. D. R. Steel, and his assistant are in the stone-built box in the background. *Right*—Watched by prospective buyers, a horse is paraded at the auction. This is the only weekly horse auction in the South of England.

THE HORSE IS IN DEMAND AGAIN

Business is Brisk at the Horse Market in Southall, Middlesex

With the return to petrol rationing horses are again in demand for service in connection with various forms of transport and other undertakings. This is apparent at the horse market at Southall, in Middlesex, where business is brisk. It is the only horse market in the South of England, and prospective buyers come from surrounding areas. Many horses which are suitable for light haulage work fetch upwards of £50, and bigger draught animals can easily reach £100. The horse market at Southall (and there is also a general cattle market) was founded on November 11, 1699, by a Royal Charter of King William III, which decreed that a market should be held there each Wednesday for ever. One of the present directors of the market is Mr. R. J. Steel, whose father originally leased it from the Earl of Jersey, and who subsequently obtained the freehold.

A CLOSE INSPECTION: A horse's teeth are carefully examined during the bidding at Southall.

OUTSIDE THE AUCTIONEER'S BOX: While he waits for bids, some of the prospective buyers carefully examine a grey mare which has been put up for sale at the auction. The animal is in the charge of the horse-runner. Each horse is walked and trotted in the "ring" during the sale.

IN AND OUT OF THE "RING": *Left*—Prospective buyers gather round as two horses are paraded during the auction. *Right*—Driving away after the sale. An additional pony is "on tow" at the rear of the trap, which is hauled by a skewbald. The buyers at the auction come from areas throughout the home counties and as far afield as Berkshire, Hampshire and Herefordshire. They are also able to buy appliances and horse vehicles, some of which have been in store for years.

INSIDE THE WAIPUNA CAVE NEAR TE KUITI, NEW ZEALAND: Stalactites, stalagmites and "straw stalactites" present a fantastic picture in the "Studio," a dry upper level, which is about twenty minutes' walk from the entrance of the vast cavern. The cave, high in the hills near the Waitomo-Te Anga road, south of Auckland, was discovered last Easter. Since then it has been visited several times by members of the New Zealand Speleological Society and other cave explorers.

CAVE EXPLORATION IN NEW ZEALAND

The Waipuna Cave, in New Zealand's North Island, is Penetrated by Speleologists

Some of the finest cave scenery yet discovered in New Zealand has been brought to light by a recent speleological expedition which penetrated deep inside the Waipuna Cave, west of Te Kuiti, in North Island. This particular underground cave system was only discovered last Easter, and a great deal of the complicated maze of tunnels and galleries has still to be completely explored. However, the photographs brought back by the latest expedition from Auckland University College are sufficient evidence that the cave ranks high in both interest and beauty among the other underground cave systems in the country.

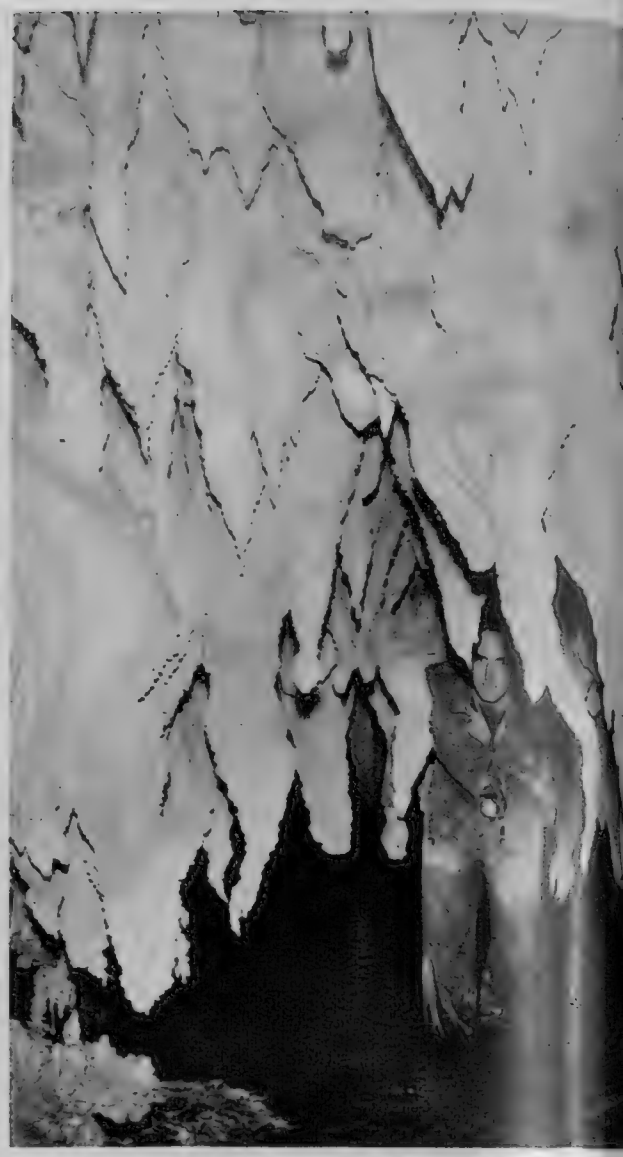
Situated high in the hills near the Waitomo-Te Anga road, Waipuna Cave was visited many times by speleological teams before an entrance could be made past the difficult opening. Among the expeditions which attempted to enter were several from the New Zealand Speleological Society and many smaller teams. Just before last Christmas two members of the Hamilton Tomo Group of cave explorers managed to force their way past the water barrier formed by a stream which flows out of the cave at the entrance. They had, however, to return immediately after their cold dive without exploring any of the caverns or galleries.

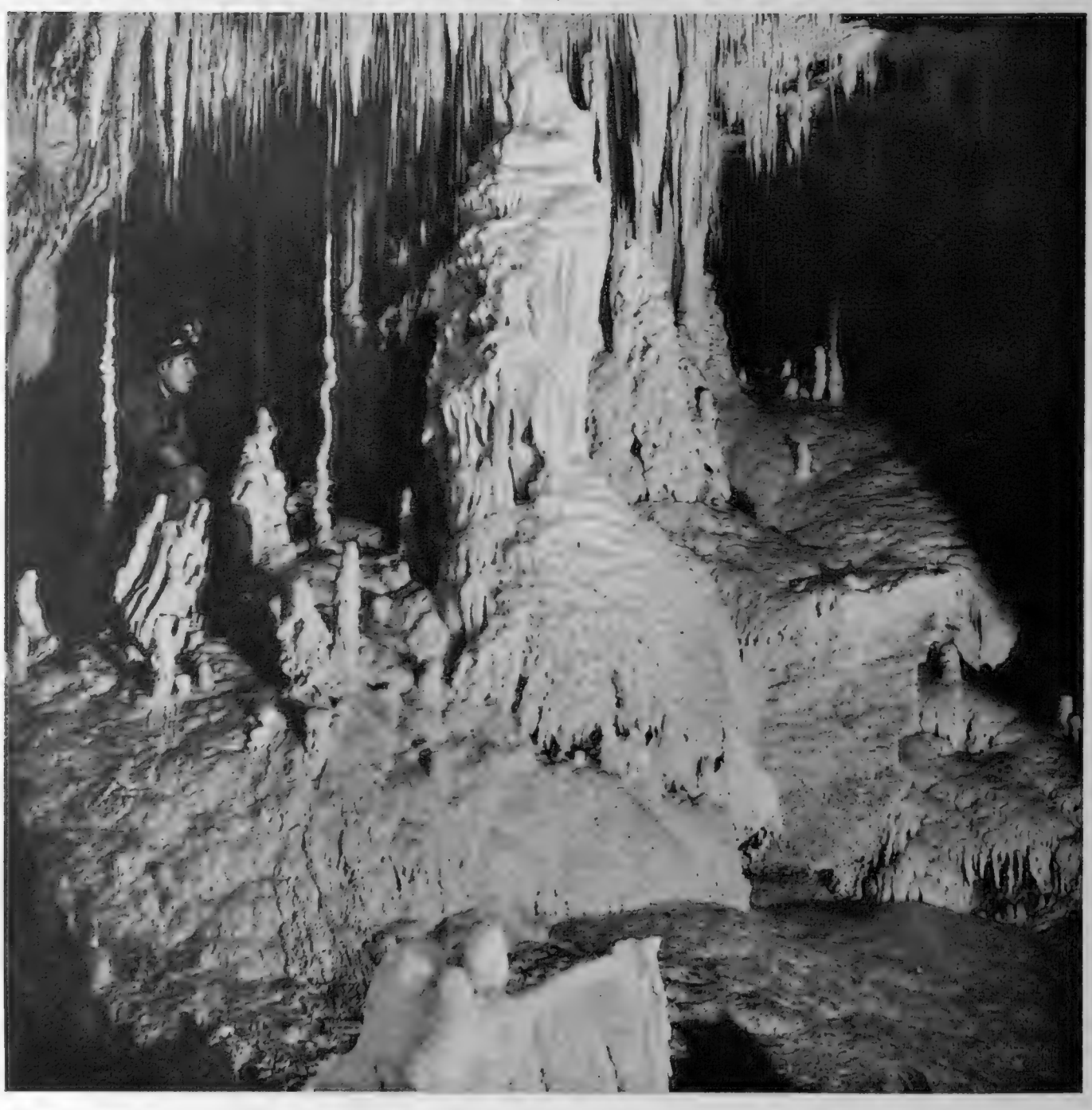
The next expedition to have any measure of success was the university team which took these photographs. Three members of the expedition, which was formed from students of Auckland University College, made an entrance into the cave through the stream at the mouth. They dived through a 6-ft.-long tube with a waterproof bag containing a towel, dry clothing and cameras. Once the initial barrier was passed, the three students were able to change into dry clothes and carry out a detailed exploration of several caverns and galleries. Apart from the chambers on the same level as the entrance, they were able to reach a series of higher passageways which contained distinctive and very beautiful rock formations. The largest of these passageways they dubbed the "Studio." Its finest feature is the "Pine Forest," a dense formation of small stalagmites, each from 2 to 3 ins. in height, covering a corner of an alcove.

After their discovery of some of the upper dry levels the exploration party turned their attention to some of the more awkward passages. In one case they were able, after much difficulty, to force a way through a narrow tube into a large chamber, at the bottom of which, at least 50 ft. below, ran another large stream. They were able to verify that this second stream was not the same one which flowed out of the cave at its entrance. The party believes that this stream forms an underground link between the Waipuna Cave and the nearby Lucky Strike cave system which has also not yet been fully explored.

Both these cave systems lie in a region of North Island which was once highly volcanic. This central belt of the island, south of Auckland and north of the Wellington Peninsula, contains several quiescent volcanoes, among them Ruapehu (9,175 ft.), which has a crater lake of warm water at its summit, Whakaari, White Island, in the Bay of Plenty, which is still active, and Mt. Egmont (8,260 ft.), which is now extinct. It is also an area where underground streams and rivers are common.

THE ROCK LANDSCAPE IN THE INTERIOR OF THE CAVERN: A huge stalagmite near the entrance of the cave dwarfs one of the members of the expedition which took these photographs. *Below*—The size of these stalactites and stalagmites in the "Studio" can be judged by the height of the crouching speleologist on the left.

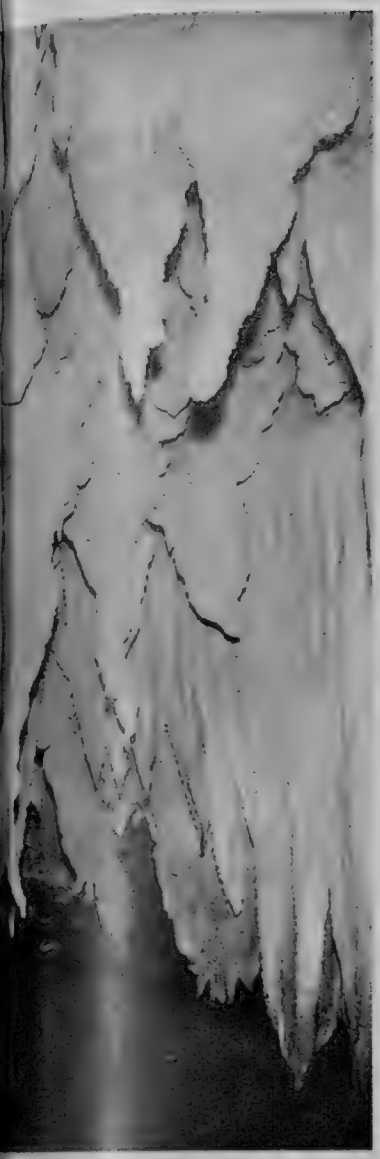




Above—NEAR THE ENTRANCE: Clusters curiously twisted stalactites form a arch above the stream near th entrance to the Walpuna cave system

CAVE EXPLORATIO

A CORNER OF THE "STUDIO": The featur cave is covered with a dense mass columns near the entrance to th



On right—WAIPUNA'S "LEANING TOWER OF PISA": A stalagmite which has fallen to one side is a feature of this chamber in the cavern system.

IN NEW ZEALAND

f this dry upper level is the "Pine Forest," where the floor of the mall stalagmites, each from 2 to 3 ins. high. *On right*—Two large Studio" are inspected by a member of the speleological expedition.

PROTECTING CANAL BANKS

A New and Cheaper Method of Reinforcing the Banks of the Waterways

A REINFORCED CANAL BANK: Concrete piles driven down along the bank are tied firmly together with old railway lines on the strengthened side of a waterway.

A STRETCH OF RESTORED BANKING NEAR TRING, IN HERTFORDSHIRE: Two barges pass a canal curve reinforced by the new process introduced by British Transport Waterways in some stretches of the canals. The work is continuing in the South-Eastern, North-Western, and North-Eastern Waterways Divisions, much of it on the lesser-used canals.

On left—

A CANAL BANK AWAITS PROTECTION: Concrete piles line the banks of this waterway near Tring before the work of restoration begins. The small factory which produces the concrete piles is at Marsworth on the Grand Union Canal, near Tring.

A relatively new industry has recently been developed on the canal banks of British Transport Waterways. This is the mass-production of concrete piles designed for the reinforcement of the canal sides. Already results are evident in long, neat stretches of waterway safely contained in white walls of concrete piles. The work is continuing in the South-Eastern, North-Western and North-Eastern Waterways Divisions, much of it on the lesser-used canals which do not at present justify large-scale development from the economic point of view but which are, nonetheless, fully open. It is on these minor canals that the British Transport Commission would welcome an increased flow of commercial traffic.

Bank protection has always been a difficult problem on the waterways, especially since the adoption of powered craft. Over £3,000,000 is being spent on work of this kind as part of the Transport Commission's £5,500,000 Development Plan for their principal wide waterways. On the narrow shallow-draught canals, however, where traffic is not heavy, the problem was to find a cheap effective method of preventing the constant erosion which breaks down the canal banks and silts up the waterway.

To combat this erosion a reinforced concrete pile, strong enough to be driven into a subsoil ballast, was designed by engineers in the Commission's South-Eastern Division. A small factory for the mass production of these piles was then set up at Marsworth on the Grand Union Canal, near Tring, in Hertfordshire. Similar plants are now being developed in the North-Western Division at Market Drayton on the Shropshire Union Canal, at Northwich on the Weaver Navigation Canal, and at Burnley on the Leeds and Liverpool Canal. An earlier plant of this type already exists at Crowle on the Sheffield and South Yorkshire Navigation Canal in the North-Eastern Division.

Two sizes of pile are mainly produced at the Marsworth factory. One of 8 ft. 6 ins. and another of 6 ft. 6 ins., each being 12 ins. wide and 4 ins. thick and reinforced with a cage of high-tensile steel. A third size, 4 ft. long, 12 ins. wide and 2 ins. thick is made for use at banks where no depth of water is needed. Although small, the Marsworth plant is laid out on typical factory lines. It consists primarily of a long shed equipped with outward and return runways. At one end of this shed the concrete mixture is shovelled from a mixer into the waiting moulds. The moulds themselves are of very simple design, consisting merely of a stout base plate bolted to two steel-lined side pieces. When the shorter piles are required a stop can be inserted in the mould. The steel cage reinforcement is bent to shape by a hand-operated tool specially designed for the task.

As the moulds are filled they pass two at a time on to an electric vibrating table, from which they pass down the outward runway. Within six hours of casting the sides of the moulds are stripped, but the piles remain on their bases for another twenty-four hours before being taken to the stacking yard. There they stay "curing" for twenty-eight days before being loaded by mobile crane into the barges for transportation to the restoration sites where they will be used. In the factory shed the moulds are rebolted and reassembled with a fresh reinforcing cage, then fed back to the concrete mixer on the return runway. In this manner the mass-production of the piles can continue uninterrupted.

LOADING THE PILES AT THE FACTORY: Workmen load the finished concrete piles into barges at Marsworth, Hertfordshire, for conveyance to the various restoration sites. Three similar factories are being developed on other canals and another already exists.

STACKING CONCRETE PILES AT CROWLE: This factory on the Sheffield and South Yorkshire Navigation Canal, in the North-Eastern Division, is already fully developed. It was the first of the factories to start mass-producing the piles.

AMERICA'S UNMANNED TEST MISSILE: Pictures have recently been released of the North American X-10, a test vehicle which takes-off (see *left*) and carries out all the normal functions of a supersonic aeroplane by remote control. The X-10 has been used for the U.S. Air Force SM-64 Navaho programme, under which intercontinental strategic guided missiles are being developed. Testing of the X-10's aerodynamic design and guidance systems has now been concluded at the Test Centre in Florida.

THE X-10 CLIMBS: This test vehicle has been flown successfully at supersonic speeds in a series of tests at the Missile Test Centre in Florida. The North American X-10 is powered by two conventional Westinghouse J-40 turbojets. Trials began in January 1954.

UNMANNED FLIGHT AT HIGH SPEEDS

New Pictures of the North American X-10

Testing of North American Aviation's X-10, an unmanned test vehicle for the U.S.A.F. SM-64 Navaho intercontinental strategic guided missiles, has been concluded. Initial operations with the SM-64 proper have begun, and although no illustrations of this have been published, it is expected to have a long cylindrical body with stubby wings carrying the powerplants—ramjet and rocket—at their tips. Several versions of the SM-64 are envisaged, and the use of ordinary jet test vehicles like the X-10 has allowed many problems to be solved in easy stages. Cruising speeds of Mach 3 at 75,000 ft. are expected of the Navaho missiles and it is later hoped to attain heights of 90,000 ft. This is higher and faster than anything else apart from a ballistic missile. It also has global range and it is known to be able to take evasive action. Navaho may join the U.S. Air Forces missile armoury in 1958.

The many types of guided missile now being developed can no longer be simply divided into the air-to-air, surface-to-air, air-to-surface and surface-to-surface categories. There are, for instance, two quite distinct categories of surface-to-surface vehicles. Guided ballistic missiles, as found in some nineteenth-century fiction, have been realised for several years. The U.S. Army has "Corporal" and "Honest John" at its disposal in the field. The Navaho is an entirely different type of surface-to-surface weapon from these. Properly it is known as a "cruise"-type missile and it possesses all the potential that a supersonic suicide bomber would have.

On right—

AN UNMANNED TOUCH-DOWN IN FLORIDA: A parachute brake automatically checks the landing speed of the X-10. An undercarriage is provided so that the aircraft can be recovered for repeated use.

MORE IMPROVEMENTS AT POTTERS BAR

New Tunnels and New Track to Relieve a Bottleneck

THE NEW POTTERS BAR TUNNEL IN MIDDLESEX IS TAKING SHAPE: A steel segment is being lowered into position on the new tunnel, which is situated alongside the present structure. It is one of three which are being built south of Potters Bar Station as part of a £1,750,000 scheme of British Railways to relieve a 2½-mile-long bottleneck. Two new tracks are also to be laid to increase the efficiency on what is one of the busiest lines in the country. The line (the East Coast route) runs from King's Cross to the north and more than 300 trains, including the Flying Scotsman and other expresses, use it every day. In the construction of the new tunnels steel segments and concrete are being used as compared with bricks in the existing structures. The new Potters Bar tunnel will be 1,200 yards long and the finished internal diameter will be 26 ft. 6 ins. At Potters Bar the extensive reconstruction has also included the renovation of the station.

A NEW BRIDGE IS BEING BUILT AT NEWBURY PARK, ILFORD, IN ESSEX: Vehicles are being diverted on the Eastern Avenue (which is part of the Southend Road) where a new bridge is being built over the Underground railway to form part of an improvement scheme stretching for half a mile. The scheme, costing £250,000, is designed to relieve congestion where the dual-carriageway narrows to a single track and crosses the railway at Newbury Park Station. When the construction work is completed, the old bridge, on the right, will be demolished.

On left—

AT WORK ON THE BRIDGE: It is expected to be completed by the end of the year. The Southend Road is used by a vast volume of traffic travelling from east London.

RELIEVING CONGESTION AT ILFORD

Improving a Section of the Southend Road

SCOTTISH SKI-ING AND BLIZZARD

A Special Train for Skiers; Winter Sports and other Snow Scenes in Scotland

A LONG CLIMB FOR SKIERS IN SCOTLAND: Winter sports enthusiasts, carrying their equipment, make their way up the snow-covered slopes above the pass of Drumochter. They were some of those who had travelled from Edinburgh and Glasgow to Dalwhinnie, in Inverness-shire, in a British Railways "Skiers Special." At first they found the snow soft and wet, but on the heights they encountered a blizzard. Some of the skiers turned back, but the rest went on through the storm and eventually came to a suitable practice run. This outing was part of the scheme of the Scottish Council of Physical Recreation to popularise ski-ing. Learners can obtain tuition from expert instructors.

ARRIVING FOR A DAY OF WINTER SPORTS: Skiers alight from the special train on to the platform of the station at Dalwhinnie. From here they set out to find a suitable run for ski-ing on the snow of the Grampians, in Inverness-shire.

DEEP IN THE SNOWS: Two of the skiers sink deep into the snow as they plod along a ridge which is well covered, an indication that suitable ground should soon be found for enjoying winter sports in Britain.

IN DIFFICULTIES IN THE BLIZZARD: Two motorists are having trouble in the blizzard near Balbeggie, in Perthshire. At the end of last month snow made many roads dangerous in Scotland.

THE GRANDEUR OF THE SNOW: The sun shines on the whiteness of the snow as two climbers stand below a peak above Glen Nevis, near Fort William, in Inverness-shire. In such scenes the effort of mountain climbing is amply rewarded by the sense of achievement in surroundings of isolated grandeur.

FUEL ECONOMY AND PERFORMANCE

Some Thoughts on Fuel Economy Devices; The Plight of the Driving Schools; Collecting Old Models; The A.A's new H.Q.; Production and Export Figures; a new Jaguar

By "THE SPHERE" MOTORING CORRESPONDENT

IT is not surprising that the market has been flooded, since petrol rationing began, with alleged fuel-economy devices whose inventors claim a saving of anything from 10 per cent. to 25 per cent. or more. What is the truth about these gadgets? Are they any good? Much has been written in the daily newspapers on this absorbing subject. The writers are not always in agreement. My own view is that some of these gadgets really do give more miles to the gallon, but usually at the cost of an inferior performance.

Quite a lot of these devices are based on the fact that if you weaken the mixture by feeding in more air, you are not using so much petrol. True. But you can often achieve the same result by fitting a smaller jet to your existing carburettor and making other simple adjustments. But the engine will not pull so well, and if you push it hard on a weak mixture there is a danger of burning out the valves. The carburettor fitted to the average car is a design compromise between economy and performance. If any of the so-called economy devices really had something worth-while to offer, you can bet your last petrol coupon that before you could say "Fill her up," the car manufacturers or the carburettor people would have bought up the idea for incorporation in their own designs.

Britain's driving schools are up against it. Suspension of the driving test has already put a lot of the smaller concerns out of business. Colonel Harold Atherton, president of the Motor Schools Association of Great Britain, has stated that half of Britain's 1,000 schools, which normally employ some 2,750 instructors, have had to close down altogether. Most of them, he said, were small establishments using from one to three cars. In spite of rationing, many more people would be taking driving lessons to-day if there were any chance of passing the test and getting rid of those irritating L-plates. So the Motor Schools Association has been trying to persuade the Minister of Transport to introduce an emergency system of driving tests, using qualified driving instructors as temporary examiners.

In making this approach to the Ministry the Association found itself in opposition to two other groups who were independently trying to gain the privilege of operating an emergency testing scheme: the Institute of Advanced Motorists and the motoring organisations. Although the Minister at first seemed keen on the idea of a temporary testing plan, he eventually turned it down flat. He said he hoped soon to get the official tests restarted, if only on a limited scale. This will be possible only when some of the official examiners can be released from their present fuel-rationing duties.

The sooner the better. There was a back-log of 150,000 L-drivers awaiting examination when the test was suspended. It is estimated that after six months of rationing the number will have grown to 250,000.

People who collect old motor-cars have a very rewarding hobby. There can be few thrills to equal those experienced by veteran or vintage-car enthusiasts when they discover a rare old model in good condition which is also available at a reasonable price. One collector of old cars who had a bit of luck recently is Mr. Rob Walker, of Nunney, Somerset, a man of many business interests who runs a motor-racing stable as an offshoot of his garage at Dorking, Surrey.

Not long ago he bought three lovely old cars which had been laid up at Sandbanks, near Bournemouth, since 1922: a 1922 Rolls-Royce with a Silver Ghost chassis, a 1912 10-25 h.p. 4-cylinder Mercedes, and a 1913 20-30 h.p. Fiat. The Rolls had done fewer than 200 miles in thirty-five years. Mr. Walker bought the three cars from Mrs. Mary Bonham-Christie, who, at the age of ninety-two, lives alone on Brownsea Island, off the Hampshire coast. She laid the cars up in 1922 when she went from Frome, Somerset, to live on Brownsea Island, and had not used them since.

Mr. Walker tells me that both the Fiat and Mercedes landaulettes started at the very first turn of the handle! The petrol had been wisely drained off in 1922. Not so in the case of the Rolls, more 's the pity. Inspired by a sense of misguided devotion to a famous marque, a garage man had occasionally started the Silver Ghost over the years and run the engine. After it last ran, some years ago, petrol was left in it and Mr. Walker found the fuel system completely blocked. The fault was easily rectified, and when Mr. Walker let me drive the wonderful old car the other day it ran beautifully.

In planning their new headquarters building the Automobile Association have set a fine example to other business organisations. I refer to the fact that it will have a basement car-park and an off-street loading bay for goods vehicles. In the underground park there will be room for twenty-five service vehicles of the Association's radio-controlled breakdown fleet. A turntable will be installed so that goods vehicles will be able to drive in to the loading bay without turning in the street.

Fanum House is being extended to occupy the entire island site bounded by Leicester Square, New Coventry Street, Whitcomb Street and Panton Street. The new building should be ready by May 1959. The ground floor will be almost entirely used for spacious reception rooms for visiting members. One of the reception offices will be open continuously day and night.

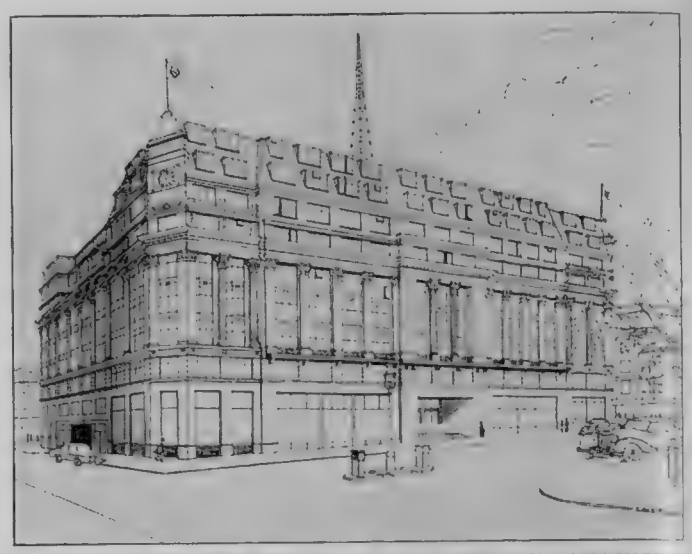
The Board of Trade have issued the 1956 production and export figures for the British motor industry. They make gloomy reading. As far as cars are concerned, production was down 22·3 per cent. on 1955 and exports showed a 15·4 per cent. drop. With a car output of 707,594, 1956 was Britain's third best year. The number of cars sold abroad—317,992—gave the industry its fifth best year on the car export side of the picture.

Fuel rationing caused both production and exports to slump badly in December. Output in the last month of the year dropped 20 per cent. on November and 40·5 per cent. on December 1955. The industry's labour force declined by 45,000 in 1956, according to reliable estimates. The present labour force is around the 400,000 mark, but with many thousands working a three-day or four-day week. The industry is in the middle of the worst patch in its whole history, and it does not seem likely that car production in 1957 will exceed two-thirds of even the 1956 total as long as petrol rationing lasts.

It was good news when Vauxhalls and Jaguars went back to full-time working at the end of January, but the significance of this happy development could easily be exaggerated. In the case of Vauxhalls the reason for the improvement was the start of a switch-over to their new car factory at Luton. Jaguars are a specialist car firm who have lately had some fat orders from the United States, Malaya, France, Belgium, and other countries.

Sir William Lyons, chief of Jaguar Cars Ltd., has announced a new model. It is the "D"-type "Jag" in full touring trim, which was illustrated in last week's SPHERE. With a top speed of 170 m.p.h. it is the fastest car of its kind on sale anywhere in the world. The "D"-type Jaguar is the car which won the 24-hour race at Le Mans last year at an average speed of 104 m.p.h. Now that it is available with full-width windscreen, a snug hood, comfortable upholstery and other refinements, it is eligible to take part in sports-car races in the U.S. While it was offered only in its stark race-track form, many young bloods in America held back from buying it because they couldn't race it under the U.S. rules. It should now be in big demand, and for the time being it will be sold only in the U.S.

But perhaps you are not very interested in 170-m.p.h. cars. Maybe you run a "baby" saloon and get just as much fun out of your motoring as the lads who like to take part in motor sport with their "hot rods." Well, there 's news for you, too. I refer to the Standard Ten which the makers sent down to Devon to prove the efficiency of their Standrive system of two-pedal control.



THE NEW HEADQUARTERS BUILDING OF THE AUTOMOBILE ASSOCIATION IN LONDON: An artist's impression of Fanum House as it will appear when completed in May 1959. It will have a basement car park and an off-street loading bay for goods vehicles.

Mr. Ken Richardson, competitions engineer of the Standard Co., took down a car picked at random off the assembly line. He drove it up Lynton Hill with three passengers, the total weight of the four occupants being 52 stone. He successfully made four stop-and-restart tests on the steepest part of the hill. Then he put ballast in the boot to bring the total load up to 68 stone—the equivalent of six passengers. With this considerable burden Richardson allowed the car to run backwards down the 1-in-4 gradient. When it was travelling at what one of the passengers (who has my sympathy) called "an alarming speed," Ken Richardson, without touching the brakes, stopped the car entirely on the clutch. Keeping his foot hard down on the throttle, he made the car pull away up the hill without pause. Altogether, it was quite an impressive demononstration.

Congratulations to Mr. John Cooper, Surrey builder of Cooper racing cars, on his enterprise in starting a nursery for racing drivers. He has invited young men who fancy their skill at the wheel to apply for a test with a chance of being taken into the Cooper works team—or some other factory team—if they show real promise.

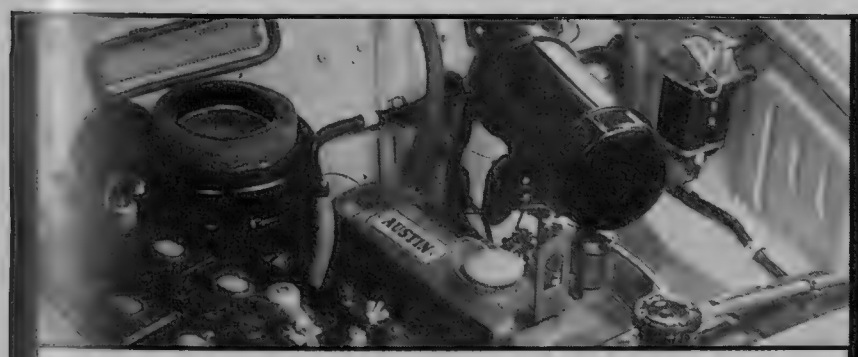
Mr. Cooper will take some racing cars down to Brands Hatch to put the budding Mosses and Collinses through their paces. Looking on at the trials will be famous drivers who will help to assess the novices' skill and coach those who seem to possess natural talent.

A NEW THREE-WHEELER DELIVERY VAN: It is the tradesman's version of the Lambretta scooter and is capable of carrying nearly 7 cwt. Petrol consumption is 90 m.p.g. The two rear wheels are driven by a propeller shaft through a differential unit. The cost (including tax) is £282 6s. 1d.

"BALLOONING" IN HUDDERSFIELD: The inner tube of the front off-side wheel of this lorry in Huddersfield, Yorkshire, burst through the inner rim of the tyre cover to produce this "balloon" effect. When the driver was faced with the problem of removing the wheel, he crouched in the shelter of the wing and punctured the tube with his penknife.

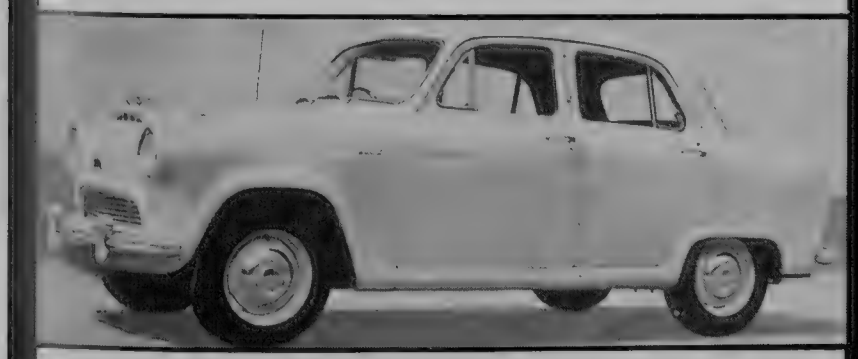
CONDITIONS OF SALE AND SUPPLY.—This periodical is sold subject to the following conditions, namely, that it shall not, without the written consent of the publisher first given, be lent, resold, hired out or otherwise disposed of by way of Trade except at the full retail price of 2s., and that it shall not be lent, resold, hired out or otherwise disposed of in a mutilated condition or in any unauthorised cover by way of Trade, or affixed to or as part of any publication or advertising, literary or pictorial matter whatsoever.

THE AUSTIN A.50 WINS ON ALL POINTS



POINT 1: ECONOMY. The 1956 A.50 won outright a fiercely competitive petrol economy test in South Africa. And the 1957 high-compression engine gives even more m.p.g.

POINT 3: ROOM. Five people can make themselves very comfortable in the foam rubber seats. Deep parcel shelf, giant boot, safety glass all round.



POINT 2: LOOKS. The new Low Look is both sleek and practical: for with a lower centre of gravity you get firmer cornering and better roadholding altogether.

POINT 4: POWER. The new high compression engine has tremendous performance. Makes mountains seem like molehills, doesn't complain though driven hard for hours on end.

Manumatic Transmission (gear-changing without the clutch) and overdrive are optional extras. Price (Standard Saloon): £514 plus £258.7.0 p.t. All models backed by B.M.C's 12-month warranty and by B.M.C. Service—the most comprehensive service organization in Europe.

Buy **AUSTIN** for more miles a gallon

THE AUSTIN MOTOR COMPANY LIMITED · LONGBRIDGE · BIRMINGHAM

The World of Books: By VERNON FANE

REALITY AND ROMANCE

The Life of a Nurse, an Autobiography of Hospital Experiences; New Novels of Love, Heroes and the Future

SURGEONS' reminiscences, doctors' cases and nurses' experiences; these are three sure-fire recipes for a book heading for the best-seller lists. Miss Jane Grant, with the necessary background of three years' training as a nurse and a light, insouciant style that stops just this side of the flippant, has produced a book with many of the signs of success about it and is commendably readable. COME HITHER, NURSE (Robert Hale. 10s. 6d.) is neither pretentious nor technical—except in a very few passages which illustrate the author's youth more than her desire to impress—and it is, by and large, admirable propaganda for the nursing profession.

Even if spring is *not* just around the corner, there is a truly vernal flood of novels, quite undeterred by wintry weather. First of all, Mr. Robert Standish's BLIND TIGER (Peter Davies. 15s.). This is a story about two "bridge orphans" whose mothers neglect them in a series of Riviera hotels and *pensions* while they attempt to earn their livings at cards. The two grow up to fall in love, part (one to America and riches and the other to the London life of a beautiful and intelligent girl), and meet again. Mr. Standish writes sympathetically of them and brilliantly of the background of black market clubs and highly suspect deals which make up part of the tale, but most readers will prefer those chapters in which he describes the Provence with which he is so familiar.

Falling in love, failing in marriage, falling out of love and into marriage again: such are the preoccupations of the characters in Mr. Maurice Edelman's new novel, THE HAPPY ONES (Wingate. 13s. 6d.), which is suavely written, often amusing and always worldly. It is also by far the best thing in the line of fiction that Mr. Edelman has yet given us. I would recommend it if only for the subtlety and, at the same time, the good sense with which the closest human relationships, including those of a boy with his parents, are shown.

INTO THE DREAM (Longman's. 15s.) is one of Mr. Edward Hyams' unclassifiable novels; something of a frolic, because this author is never without his own brand of original humour and something of a tragedy, too, for reasons which give the book its force. The principal figure is the son of a millionaire and his problem, though obviously not economic, is still perfectly real to him, for this Edwin deeply distrusts thinking and the state of the world which he attributes to thinking. He therefore seeks his own form of happiness in nature and in love, always provided that love should have no whisper of the intellectual about it.

THE SEND-OFF (Heinemann. 15s.) is a young man's novel and it has the faults and the virtues of the kind one might expect, adding up, however, to a balance on the credit side. Mr. Robin Hiscock has written about a boy who, on his first sea voyage, finds himself in a scrape at one of the Channel ports, and, with an older seaman whose resourcefulness he greatly admires, goes on the run without papers or money or even a knowledge of French. His adventures, at first with his unscrupulous mentor and later alone, form the book's plot and they make entertaining and sometimes really moving reading.

Mr. George Woodman has written a novel based on a factual theme of such heroic proportions that the only wonder is that no one has attempted it before. TAKEN AT THE FLOOD (Macmillan. 15s.) is a story of the devastating winter inundations along the East Coast just four years ago. He was himself caught in the disaster and he brings much of the terror and the shock of the unbelievable actually happening into his descriptions. Exciting stuff and treated with force and simplicity.

The same might well be said of Mr. Paul Bowles' novel, THE SPIDER'S HOUSE (Macdonald. 16s.), although the setting and the choice of characters could scarcely be more different. The scene here is the ancient city of Fez in the present day and the author is concerned with the tremendous changes in Morocco, both political and social, and with the organisation of the anti-French movement. Mr. Bowles impresses one as having a real and profound understanding of the actual situation and as having translated it to fiction only to make it more sharply effective.

The next two novels are grim and, one hopes, inaccurate portents of things to come. First, Mr. James Barlow's ONE HALF OF THE WORLD (Cassell. 13s. 6d.), set in a time after a war that Europe had lost and during which England had suffered an army of occupation. This is not so much a glimpse into the future or a piece of Wellsian science fiction as an exercise in the simple ethics of good and evil. Chattily written and not ineffective.

DAY OF MISJUDGMENT (Gollancz. 15s.) has a comic opening and a trace of sardonic humour throughout its rather macabre length and through all the fanciful details about a Judgment Day timed for 2033 and including in its scope and within the country of Palestine, Christians, Muslems and celebrities of other or no religions. Thus, Mr. Bernard MacLaren shows us Oscar Wilde, Queen Victoria and Whistler or, more endearingly, Mum and Dad from Birmingham, making their way across the desert to the Vale of Jehoshaphat. Odd, fanciful and not particularly cheering.

LEARN TO SAY GOOD-BYE (Hodder and Stoughton. 12s. 6d.) is a volume of fourteen short stories by Miss Jessamyn West and most of them have their basis, not only of scenery but of local idiom and existence, in California. It should be added that Miss West's choice of a Californian background has nothing to do with Los Angeles, Hollywood or San Francisco, but is principally rural. It should also be pointed out that some of the stories are pretty good, some difficult and some as odd as three fives.

A TRIPTYCH FOR SOUTH AFRICA: The panels are the work of Muriel Wheeler, the wife of the new President of the Royal Academy. They will be part of the memorial to King George VI in Cape Town's new cathedral. The triptych shows King David, the Madonna and Child and an Angel. Mrs. Wheeler, like her husband, is a painter and sculptor.

OUT OF THE STRONG (Macmillan. 15s.) is the first of a group of five books from overseas and it is Mr. R. E. Lighton's novel about the South African bushveld, its natives and its Afrikaners. This is not a book to set racial prejudices in a turmoil but a story by a man who knows and loves the region he describes, and wants others to appreciate it with him.

THE ABBE MOURET'S SIN (Elek. 18s.) could scarcely provide a greater contrast for this is a translation, by Mr. Alec Brown, of Emile Zola's work on the problem of male chastity.

The late Maxence van der Meersch left a novel which has been translated by Mr. Edward Fitzgerald and which is the sequel and conclusion of the story of *La Fille Pauvre*. Nevertheless, the new book, THE HOUR OF LOVE (Kimber. 16s.), is a complete and sensitive work in its own right. I found this recital of the sorrows and small triumphs of a factory girl in the nineteenth century both touching and continuously interesting.

THE RETURN OF GUNNER ASCH (Weidenfeld and Nicolson. 13s. 6d.) is a title that speaks for itself for it is the third book in Hans Hellmut Kirst's series of satires on the German Army and the German military mind. Not every Englishman finds the impulse to study a German book about their military machine but there must always be exceptions and this—chiefly for its *anti*-militarism—is one.

THE RED MARTEN (Michael Joseph. 15s.), by Peter Nisser, has been translated from the Swedish by Naomi Walford and it is an historical novel dealing with Sweden in the seventeenth and eighteenth centuries. Authentic and even impressive in its regional atmosphere but scarcely light reading except for saga enthusiasts.

The third and, by any estimate, the most poignant of Bryher's historical novels is THE PLAYER'S BOY (Collins. 12s. 6d.), which I have read with that shock of pleasure and freshness that comes from meeting an original talent. In her earlier books there was a promise of this; in the present book, which is about a youth faithfully apprenticed to one of the great Elizabethan actors, there is the achievement itself, wonderfully evocative, solid in its background of research and very like a newly-opened window on one of the greatest ages that Englishmen have ever known.

AFRICA CALLING

The 1957 Guides to a Great Continent

The remarkable lure of South Africa is not easily explained. It is, in one sense, a new country, with the pioneering instinct still dominant, but in another sense it is old with the patina of time. Anyone who walks to-day among the old Dutch houses and the oak groves of the Cape cannot fail to understand the gracious place that it holds in Dutch colonial history. The first glimpse of Cape Town, with the mountain that broods over it, is a never-to-be-forgotten experience. South Africa is a land of extraordinary variety. Durban, with its sub-tropical climate, its permanent sense of holiday; Johannesburg, with its up-and-coming industrial expansion and its near intoxicating upland air; Bloemfontein and Stellenbosch, with their strong reminders of Dutch pioneering, all offer contrasts.

No single volume comes more readily to the aid of the tourist in learning about this country and its near neighbours than the YEAR BOOK AND GUIDE TO SOUTHERN AFRICA (Robert Hale. 10s. 6d.). This is edited annually by A. Gordon Brown for the Union Castle Company, the 1957 edition containing close on 1,000 pages. It is over sixty years since the Union Castle first started on this great project. It had then as its primary purpose the aim of providing the traveller with all the information he required. To-day the scope is very much wider, and *Southern Africa* is also an indispensable handbook for the businessman.

At one time there was a section on East Africa. Now this constitutes a separate volume, and the YEAR BOOK AND GUIDE TO EAST AFRICA (Robert Hale. 8s. 6d.) is cast in the same mould as its illustrious companion. There is detailed information on all the places most worth visiting, carefully arranged in convenient routes. Both volumes contain a first-rate map section.

The post-war period has been extraordinarily fruitful in the field of Roman excavation in Britain, and this has not been by any means due only to the opportunities offered by the blitz. As far as London is concerned, of course, those opportunities have been remarkable, and very full advantage has been taken of them. In SEEING ROMAN BRITAIN (Evans Brothers. 21s.) Leonard Cottrell makes a grand tour of 3,500 miles through the provinces, finally ending up in London, where, amid the gaunt skeletons of bombed-out offices, he takes us upon a fascinating urban journey, re-creating the Londinium of the fourth century A.D. Also of unusual interest in the author's masterly survey is his description of the twin cities of Cearleon and Caerwent, most notably Caerleon, the City of the Legions, where the work of Sir Mortimer Wheeler and the late Mr. V. E. Nash-Williams has revealed nearly a third of this old Roman Army headquarters upon the Marches of Wales. Mr. Cottrell has written a really excellent book on a subject very close to his heart.

Professor André Bonnard, of the University of Lausanne, is one of Europe's leading Hellenists. He has attempted to present a popular introduction to Greek civilisation from the Iliad to the Parthenon, showing the emerging glory of the Greek achievement against the background of the social struggle. This does not pretend to be a complete history, but rather presents the subject in perspective. GREEK CIVILISATION (Allen and Unwin. 30s.) has been translated by A. Lytton Sells.

For many years Bernard Moore has been a kindly, clear-sighted and amusing observer of the international effort to put an end to wars. Nobody who reads his book THE SECOND LESSON (Macmillan. 21s.) could doubt the author's desire to see the effort succeed, or indeed his sincerity, but they will, beyond doubt, enjoy the way in which he puts the sometimes over-pompous United Nations in a human setting. Mr. Moore is doubly well qualified to write about U.N., for he was a camp follower of the old League of Nations and has seen the virtues and the failings of both the great experiments in world co-operation.

Colonel Wilfred Byford-Jones has all the aura of a cloak-and-dagger man with just that touch of mystery necessary to sustain the role. He knows the Middle Eastern world intimately, and has written a book which will be of immense interest to all who would wish to get to grips with Arab thought and feeling. ADVENTURE WITH TWO PASSPORTS (Robert Hale. 21s.) includes interviews with both Colonel Nasser and King Hussein of Jordan, and deals with the background to many of the events which led up to our being bereft of oil.

Raymond A. Lyttleton has entranced B.B.C. Television audiences with his surveys of the universe. In THE MODERN UNIVERSE (Hodder and Stoughton. 16s.) the text of those programmes is greatly amplified, and some excellent photographs and illustrative diagrams are included. The author has avoided technicalities where possible in this review of the penetrating achievements of science.

For Greatest Grip
on any road in any weather

SUBURBANITE

by

GOODYEAR

Slipping in mud, slush or snow wastes engine power and precious petrol. Fit Goodyear Suburbanites now — particularly on your rear wheels — to get the greatest grip on any road in any weather. **Then you'll be sure of making the ration go further this winter.** The sharp-edged, self-cleaning lugs on the Suburbanite bite and grip in *every* direction — give surer starts and safer stops. Don't get bogged down this winter, get Suburbanites — the traction tyres that only your brakes will stop.

- ✳ **Wider, flatter tread has bigger braking surface.**
- ✳ **Knife-edged lug bars grip where other tyres slip.**
- ✳ **Centre grooves and indented shoulders resist side slip and wheel spin.**
- ✳ **Special tread ensures smooth ride — is self cleaning — doesn't clog.**

IN TUBELESS OR TUBE-TYPE, SUBURBANITE OUTPULLS, OUTSTOPS, OUTPERFORMS EVERY OTHER TYRE IN EVERY WINTER TEST

No lack of night life

Fascinating Native Costumes

The most thrilling holiday we've ever known . . .

"We've been touring round South Africa for six weeks and we're spending a week or two at this delightful coast resort before flying home. What a wonderful time we've had. Every waking hour was packed with adventure. Imagine the thrill of having real live lions strolling past while you sit safely in your car . . . or great clumsy hippos drowsing in the river . . . and all the animals you see roaming free in the game reserves.

There's so much more that's different in South Africa —the Native customs, the wonderful scenery and the glorious sunshine every day all day."

LAND OF SUNNY CONTRASTS

South Africa

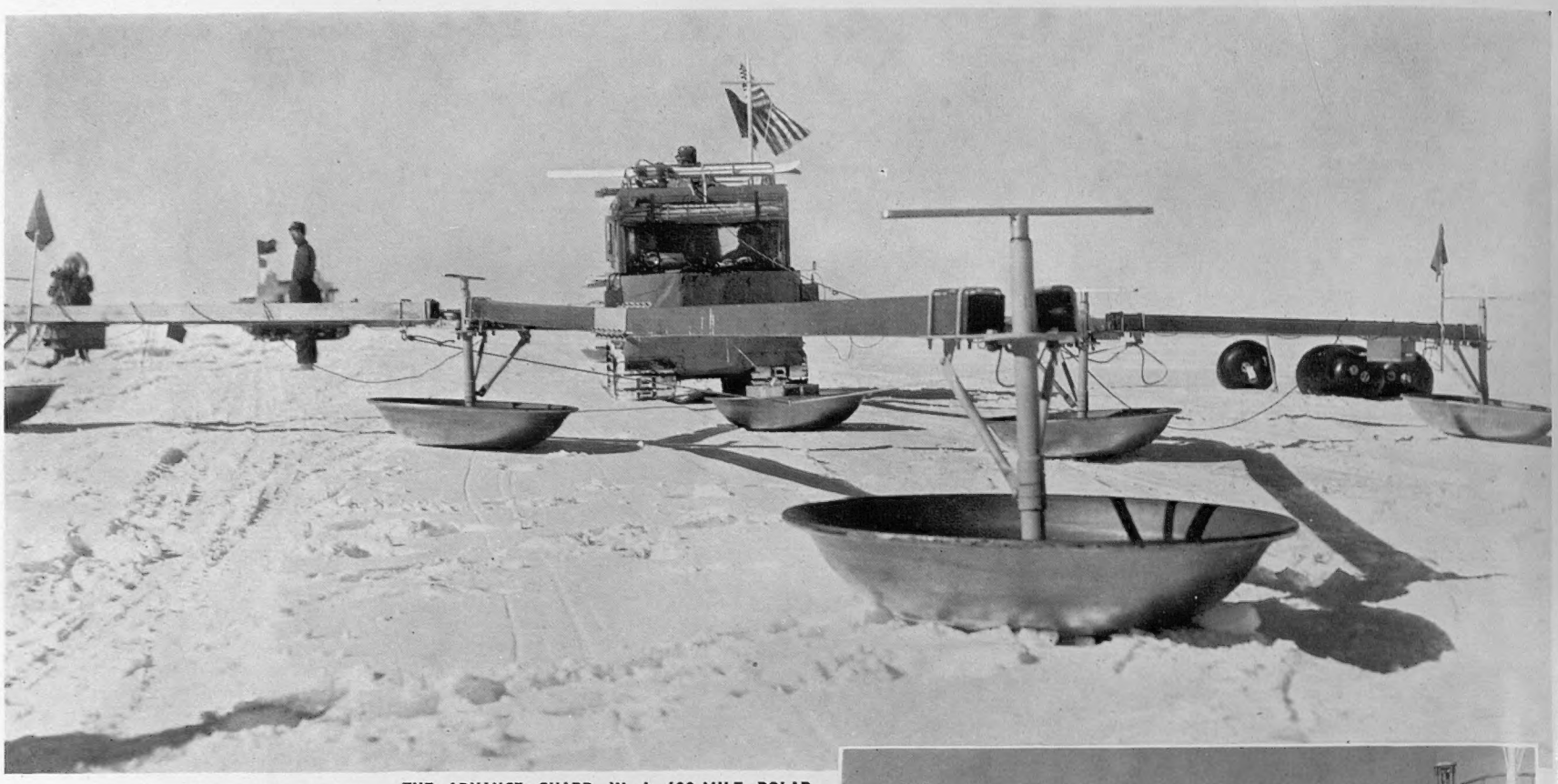
You are invited to call or write to this office for free and friendly advice about holidays in this sunny land, together with descriptive literature—or consult your Travel Agent.

SOUTH AFRICAN TOURIST CORPORATION

SATOUR

70 PICCADILLY, LONDON W.1 *Telephone : GROsvenor 6235*

475 FIFTH AVENUE, NEW YORK 17



THROUGH THE POLAR SNOWS

An American Party Sets Out on a 600-mile Trek in Antarctica

THE ADVANCE GUARD IN A 600-MILE POLAR JOURNEY: A crevasse detector, of which the operative parts appear to be large bowls, is harnessed to the front of a Weasel tracked vehicle of the U.S. Navy at the Antarctic station Little America V in the Bay of Whales. The unit was about to head a column of explorers on a 600-mile journey to a location in Marie Byrd Land. There a United States base is being set up for the Geophysical Year.

On right—

PROTECTION FROM UNSEEN DANGERS: The bowls of the crevasse detector are fitted to give warning to the crew of the Weasel when approaching danger beneath the snow.

EST 1790
(REGISTERED TRADE MARK)
SANDEMAN
SCOTCH WHISKY

SANDEMAN & SONS LTD., EDINBURGH

VALAIS

An Alpine Wonderland with a Mediterranean Climate

Make the most of your holiday this year by visiting the sunny land of the Valais

Switzerland's

most romantic region and starting-point for the great highroads of the Alps.

Amid this majestic scenery dominated by the mountains with their everlasting snows you can be sure of having the holiday of a lifetime.

And for an extra-special surprise try and go in the month of June — when it's spring in the Alps and mountain-sides are alive with flowers.

There's a traditional Swiss welcome waiting for you at more than a hundred well-known resorts where there are excellent hotels to suit all tastes and purses... places like

ZERMATT
Riffelberg - Gornergrat
MONTANA, SAAS-FEE, CRANS
VERBIER, CHAMPERY

Champex, Evolène, Bettmeralp, Finhaut, St-Luc
Almagell, La Fouly-Ferret, Vercorin, Unterbäch

Further information from your TRAVEL AGENT; the Swiss National Tourist Office, 458 Strand, London WC2, or the Tourist Office for the Valais, Sion, Valais, Switzerland.

Sooner or later you'll buy a

HAYTER REGD.

... the best Rotary Grass Scythe

HAYTERS OF SPELLBROOK
62, Spellbrook Lane,
Bishop's Stortford Herts.
Sawbridgeworth 2383, 3391.

Audley End, Nr. Saffron Walden

Someone, somewhere is thinking of "Home" . . . someone *you* know well . . someone who would give a lot to be with you to-day! Have you thought how much THE SPHERE would mean to a kinsman—a Briton—in some distant place? The pleasure it would afford is unaccountable and the cost quite trifling.* You can arrange it to-day, so easily . . . just ask your bookstall or newsagent or write to:

The Publisher, 195, *Strand, London, W.C.2.*
Be sure to state where copies should be sent, the period required and your own name and address.
12 *months*, £5 19*s.** (*Canada*, £5 14*s.* 6*d.*);
6 *months* £3 1*s.* 9*d.* (*Canada*, £2 19*s.* 6*d.*)

* *About fourpence a day!*

THE SPHERE

The continental departure lounge, London Airport

Traveller's Joy . . .

Tomorrow they may see the sun in many different lands, hear voices speak with many different tongues.

But whether taking their leave of England or arriving in distant places, those who appreciate the fine flavour of Scotch whisky ask first for VAT 69.

By Appointment
To Her Majesty
Queen Elizabeth II
Scotch Whisky
Distillers
Wm. Sanderson & Son Ltd.

WM. SANDERSON & SON LTD · QUALITY ST · LEITH *London Office* · 63 PALL MALL · S.W.1

Published Weekly by ILLUSTRATED NEWSPAPERS, LTD., Ingram House, 195–198, Strand, London, W.C.2, and Printed in England by THE ILLUSTRATED LONDON NEWS AND SKETCH, LTD., Milford Lane, London, W.C.2. SATURDAY, FEBRUARY 9, 1957. Entered as Second-Class Matter at the New York (N.Y.) Post Office, 1903.